HARRIS COUNTY
REQUEST FOR PROPOSAL COVER SHEET

Job No. 12/0309

PROPOSAL FOR: Furnish and Upgrade Surveillance System with Internet Protocol Based Closed Circuit Television System for the Harris County Juvenile Probation Department

DUE DATE: **DECEMBER 31, 2012**

Due no later than 2:00 P.M. local time in Houston, Texas. Proposals received later than the date and time above will not be considered.

OFFERORS NOTE: **Carefully read all instructions, requirements and specifications. Fill out all forms properly and completely. Submit your proposal with all appropriate supplements and/or samples in an appropriately sized envelope or box. PACKAGE MUST SHOW THE JOB NUMBER, DESCRIPTION AND BE MARKED "SEALED PROPOSAL".**

RETURN PROPOSAL TO:

HARRIS COUNTY PURCHASING AGENT
1001 PRESTON AVENUE, SUITE 670
HOUSTON, TEXAS 77002

Buyer: Wird Brown, Jr. at wird.brown@pur.hctx.net or 713-755-5728

Total Amount of Proposal: $_____

Company Name: _____

Company Address: _____

City, State, Zip Code: _____

Taxpayer Identification Number (T.I.N.): _____

Telephone:_____ Fax:_____ e-mail:_____

Do you carry Health Insurance on your employees? ___Yes ___ No If yes, what % of employees: ____%

How did you hear of this job? ☐ Newspaper ☐ Other

Print Name_____

Signature: _____

Vendor must sign in INK; failure to sign WILL disqualify the offer. All prices must be typewritten or written in ink.

Revised 03/10

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This bid/proposal package includes the components checked below. If the item **is not** checked, it is not applicable to this bid/proposal. Offerors are asked to review the documentation to be sure that all applicable parts are included. If any portion of the documentation is missing, notify the Purchasing Department immediately. Offeror should be thoroughly familiar with all of the following items applicable to the bid/proposal before submitting an offer.

X 1. **Cover Sheet** - Complete this page, sign **IN INK** and return it.

X 2. **Table of Contents** - This page lists the applicable components of this bid/proposal documentation.

X 3. **General Requirements** - It is offeror's responsibility to be thoroughly familiar with the General Requirements.

X 4. **Special Requirements/Instructions** - This section provides information needed in order to make an offer properly. Special requirements supersede General Requirements when applicable.

X 5. **Specifications** - This section contains a detailed description of the goods/services sought by the County.

X 6. **Pricing/Delivery Information** - This form is used to solicit exact pricing of goods/services, delivery, and other costs.

X 7. **Attachments**

- X a. **Tax Form/Debt/Residence Certification** - Complete this form and return it with your offer.
- ___ b. **Bid Guaranty & Performance Bond Information & Requirements** - This form applies only to certain bids/proposals. All public work contracts over $25,000 require a Payment Bond and over $100,000 must also have a Performance Bond, in a form approved by the County. Please read carefully and fill out completely.
- ___ c. **Bid Check Return Authorization Form** - This form applies only to certain bids/proposals. Read this form carefully and fill it out completely.
- ___ d. **Vehicle Delivery Instructions** - Included only when purchasing vehicles.
- X e. **Minimum Insurance Requirements** - Included in specific requirements when applicable (does not supersede "Hold Harmless" section of General Requirements).
- X f. **Worker's Compensation Insurance Coverage Rule 110.110** - This requirement is applicable for a building or construction contract.
- ___ g. **Financial Statement** - When this information is required, you must use this form or submit acceptable financial documents.
- X h. **Reference Sheet** - When references are required, you must use this form.
- ___ i. **HIPAA Requirements**
- X j. **Exhibit A**

Revised 11/09

GENERAL REQUIREMENTS FOR PROPOSALS

READ THIS ENTIRE DOCUMENT CAREFULLY. FOLLOW ALL INSTRUCTIONS. YOU ARE RESPONSIBLE FOR FULFILLING ALL REQUIREMENTS AND SPECIFICATIONS. BE SURE YOU UNDERSTAND THEM.

General Requirements apply to all advertised requests for proposals; however, these may be superseded, whole or in part, by the SPECIAL REQUIREMENTS/INSTRUCTIONS OR OTHER DATA CONTAINED HEREIN. Review the Table of Contents. Be sure your proposal package is complete.

ACCESS TO RECORDS
In special circumstances, vendor may be required to allow duly authorized representatives of Harris County, the Harris County Hospital District or the state and federal government access to contracts, books, documents, and records necessary to verify the nature and extent of the cost of services provided by vendor.

ADDENDA
When specifications are revised, the Harris County Purchasing Department will issue an addendum addressing the nature of the change. Offerors must **sign and include it in the returned proposal package.**

ASSIGNMENT
The successful offeror may not assign, sell or otherwise transfer this contract without written permission of Harris County Commissioners Court.

AWARD
Harris County reserves the right to award this contract on the basis of LOWEST AND BEST OFFER in accordance with the laws of the State of Texas, to waive any formality or irregularity, to make awards to more than one offeror, to reject any or all proposals. In the event the lowest dollar offeror meeting specifications is not awarded a contract, the offeror may appear before the Commissioners Court, Hospital District Board of Managers, the Juvenile Board or other applicable governing body and present evidence concerning his responsibility after officially notifying the Office of the Purchasing Agent of his intent to appear.

BONDS
If this proposal requires submission of proposal guarantee and performance bond, there will be a separate page explaining those requirements. Offers submitted without the required proposal bond or cashier's checks are not acceptable.

CERTIFICATION REGARDING DEBARMENT, SUSPENSION INELIGIBILITY, AND VOLUNTARY EXCLUSION
The Contractor certifies by execution of this Contract that it is not ineligible for participation in federal or state assistance programs under Executive Order 12549, "Debarment and Suspension." The Contractor further agrees to include this certification in all contracts between itself and any subcontractors in connection with the services performed under this Contract. Contractor also certifies that contractor will notify Harris County in writing immediately if contractor is not in compliance with Executive Order 12549 during the term of this contract. Contractor agrees to refund Harris County for any payments made to the contractor while ineligible.

CONTRACT OBLIGATION
Harris County Commissioners Court must award the contract and the County Judge or other person authorized by the Harris County Commissioners Court must sign the contract before it becomes binding on Harris County or the offerors. Department heads are NOT authorized to sign agreements for Harris County. Binding agreements shall remain in effect until all products and/or services covered by this purchase have been satisfactorily delivered and accepted.

CONTRACT RENEWALS
Renewals may be made ONLY by written agreement between Harris County and the offeror. Any price escalations are limited to those stated by the offeror in the original proposal.

DIGITAL FORMAT
If offeror obtained the proposal specifications in digital format in order to prepare a response, ***the proposal must be submitted in hard copy*** according to the instructions contained in this proposal package. If, in its proposal response, offeror makes any changes whatsoever to the County's published proposal specifications, the County's proposal specifications ***as published*** shall control. Furthermore, if an alteration of any kind to the County's published proposal specifications is only discovered after the contract is executed and is or is not being performed, the contract is subject to immediate cancellation.

DISQUALIFICATION OF OFFEROR
Upon signing this proposal document, an offeror offering to sell supplies, materials, services, or equipment to Harris County certifies that the offeror has not violated the antitrust laws of this state codified in Texas Business and Commerce Code §15.01, et seq., as amended, or the federal antitrust laws, and has not communicated directly or indirectly the proposal made to any competitor or any other person engaged in such line of business. Any or all proposals may be rejected if the County believes that collusion exists among the offerors. Proposals in which the prices are obviously unbalanced may be rejected. If multiple proposals are submitted by an offeror and after the proposals are opened, one of the proposals is withdrawn, the result will be that all of the proposals submitted by that offeror will be withdrawn; however, nothing herein prohibits a vendor from submitting multiple proposals for different products or services.

E-MAIL ADDRESSES CONSENT
Vendor affirmatively consents to the disclosure of its e-mail addresses that are provided to Harris County, the Harris County Flood Control District, the Harris County Hospital District including its HMO, the Harris County Appraisal District, or any agency of Harris County. This consent is intended to comply with the requirements of the Texas Public Information Act, Tex. Gov't Code Ann. §552.137, as amended, and shall survive termination of this agreement. This consent shall apply to e-mail addresses provided by Vendor, its employees, officers, and agents acting on Vendor's behalf and shall apply to any e-mail address provided in any form for any reason whether related to this bid/proposal or otherwise.

EVALUATION
Evaluation shall be used as a determinant as to which proposed items or services are the most efficient and/or most economical for the County. It shall be based on all factors which have a bearing on price and performance of the items in the user environment. All proposals are subject to negotiations by the Purchasing Department and other appropriate departments, with recommendation to the appropriate governing body. Compliance with all requirements, delivery and needs of the using department are considerations in evaluating proposals. **Pricing is NOT the only criteria for making a recommendation.** A preliminary evaluation by Harris County will be held and appropriate proposals will be subjected to the negotiating process. Upon completion of the negotiations, Harris County will make an award. All proposals that have been submitted shall be available and open for public inspection after the contract is awarded except for trade secrets or confidential information contained in the proposals and identified as such.

FISCAL FUNDING
A multi-year lease or lease/purchase arrangement (if requested by the Special Requirements/Instructions), or any contract continuing as a result of an extension option, must include fiscal funding out. If, for any reason, funds are not appropriated to continue the lease or contract, said lease or contract shall become null and void on the last day of the current appropriation of funds. After expiration of the lease, leased equipment shall be removed by the offeror from the using department without penalty of any kind or form to Harris County. All charges and physical activity related to delivery, installation, removal and redelivery shall be the responsibility of the offeror.

GOVERNING FORMS
In the event of any conflict between the terms and provisions of these requirements and the specifications, the specifications shall govern. In the event of any conflict of interpretation of any part of this overall document, Harris County's interpretation shall govern.

GOVERNING LAW
This request for proposal is governed by the competitive bidding requirements of the County Purchasing Act, Texas Local Government Code, §262.021 *et seq.*, as amended. Offerors shall comply with all applicable federal, state and local laws and regulations. Offeror is further advised that these requirements shall be fully governed by the laws of the State of Texas and that Harris County may request and rely on advice, decisions and opinions of the Attorney General of Texas and the County Attorney concerning any portion of these requirements.

GRANT FUNDING
Any contract entered into by the County that is to be paid from grant funds shall be limited to payment from the grant funding and the vendor/provider understands that the County has not set aside any County funds for the payment of obligations under a grant contract. If grant funding should become unavailable at any time for the continuation of services paid for by the grant, and further funding cannot be obtained for the contract, then *the sole recourse of the provider shall be to terminate any further services under the contract and the contract shall be null and void*.

HIPAA COMPLIANCE
Offeror agrees to comply with the requirements of the Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191 (codified at 45 C.F.R. Parts 160 and 164), as amended ("HIPAA"); privacy and security regulations promulgated by the United States Department of Health and Human Services ("DHHS"); Title XIII, Subtitle D of the American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, as amended ("HITECH Act"); provisions regarding Confidentiality of Alcohol and Drug Abuse Patient Records (codified at 42 C.F.R. Part 2), as amended; and TEX. HEALTH & SAFETY CODE ANN. §§ 81.046, as amended, 181.001 et seq., as amended, 241.151 et seq., as amended, and 611.001 et seq., as amended collectively referred to as "HIPAA", to the extent that the Offeror uses, discloses or has access to protected health information as defined by HIPAA. Offeror may be required to enter a Business Associate Agreement pursuant to HIPAA.

HOLD HARMLESS AGREEMENT
Contractor, the successful offeror, shall indemnify and hold Harris County harmless from all claims for personal injury, death and/or property damage resulting directly or indirectly from contractor's performance. Contractor shall procure and maintain, with respect to the subject matter of this proposal, appropriate insurance coverage including, as a minimum, public liability and property damage with adequate limits to cover contractor's liability as may arise directly or indirectly from work performed under terms of this proposal. Certification of such coverage must be provided to the County upon request.

INSPECTIONS & TESTING
Harris County reserves the right to inspect any item(s) or service location for compliance with specifications and requirements and needs of the using department. If an offeror cannot furnish a sample of a proposal item, where applicable, for review, or fails to satisfactorily show an ability to perform, the County can reject the proposal as inadequate.

INVOICES AND PAYMENTS
Offerors shall submit an original invoice on each purchase order or purchase release after each delivery, indicating the purchase order number. Invoices must be itemized. Any invoice, which cannot be verified by the contract price and/or is otherwise incorrect, will be returned to the offeror for correction. Under term contracts, when multiple deliveries and/or services are required, the offeror may invoice following each delivery and the County will pay on invoice. Contracts providing for a monthly charge will be billed and paid on a monthly basis only. Prior to any and all payments made for goods and/or services provided under this contract, the offeror should provide his Taxpayer Identification Number or social security number as applicable. This information must be on file with the Harris County Auditor's office. Failure to provide this information may result in a delay in payment and/or back-up withholding as required by the Internal Revenue Service.

MAINTENANCE
Maintenance required for equipment proposed should be available in Harris County by a manufacturer-authorized maintenance facility. Costs for this service shall be shown on the Pricing/Delivery Information. If Harris County opts to include maintenance, it shall be so stated in the purchase order and said cost will be included. Service will commence only upon expiration of applicable warranties and should be priced accordingly.

MATERIAL SAFETY DATA SHEETS
Under the "Hazardous Communication Act", commonly known as the "Texas Right To Know Act", an offeror must provide to the County with each delivery, material safety data sheets which are applicable to hazardous substances defined in the Act. Failure of the offeror to furnish this documentation will be cause to reject any proposal applying thereto.

NEW MILLENIUM COMPLIANCE
All products and/or services furnished as part of this contract must be compliant for the present year and forward. This applies to all computers including hardware and software as well as all other commodities with date sensitive embedded chips.

POTENTIAL CONFLICTS OF INTEREST

An outside consultant or contractor is prohibited from submitting a proposal for services on a Harris County project of which the consultant or contractor was a designer or other previous contributor, or was an affiliate, subsidiary, joint venturer or was in any other manner associated by ownership to any party that was a designer or other previous contributor. If such a consultant or contractor submits a prohibited proposal, that proposal shall be disqualified on the basis of conflict of interest, no matter when the conflict is discovered by Harris County. Potential proposers are advised that they may have disclosure requirements pursuant to Texas Local Government Code, Chapter 176. This law requires persons desiring to do business with the County to disclose any gifts valued in excess of $250 given to any County Official or the County Official's family member, or employment of any County Official or the County Official's family member during the preceding twelve (12) month period. The disclosure questionnaire must be filed with the Harris County Clerk. Refer to Texas Local Government Code, Chapter 176 for the details of this law.

PRICING

Prices for all goods and/or services shall be firm for the duration of this contract and shall be stated on the Pricing/Delivery Information form. **Prices shall be all inclusive: No price changes, additions, or subsequent qualifications will be honored during the course of the contract.** All prices must be written in ink or typewritten. Pricing on all transportation, freight, drayage and other charges are to be prepaid by the contractor and included in the proposal prices. If there are any additional charges of any kind, other than those mentioned above, specified or unspecified, offeror MUST indicate the items required and attendant costs or forfeit the right to payment for such items. Where unit pricing and extended pricing differ, unit pricing prevails.

PROPOSAL FORM COMPLETION

Fill out and return to the Harris County Purchasing Department ONE (1) complete proposal form in an appropriately sized envelope or box. **PACKAGE MUST SHOW THE JOB NUMBER, DESCRIPTION AND BE MARKED "SEALED PROPOSAL."** An authorized representative of the offeror should sign the Proposal Cover Sheet. The contract will be binding only when signed by Harris County, funds are certified by the County Auditor and or the Hospital District, as applicable, and a Purchase Order issued.

PROPOSAL RETURNS

Offerors must return all completed proposals to the Harris County Purchasing Department reception desk at 1001 Preston Avenue, Suite 670, Houston, Texas **before 2:00 P.M. LOCAL TIME IN HOUSTON, TEXAS** on the date specified. Late proposals will not be accepted.

PURCHASE ORDER AND DELIVERY

The successful offeror shall not deliver products or provide services without a Harris County Purchase Order, signed by an authorized agent of the Harris County Purchasing Department. The fastest, most reasonable delivery time shall be indicated by the offeror in the proper place on the Pricing/Delivery Information form. Any special information concerning delivery should also be included, on a separate sheet, if necessary. All items shall be shipped **F.O.B. INSIDE DELIVERY** unless otherwise stated in the specifications. This shall be understood to include bringing merchandise to the appropriate room or place designated by the using department. Every tender or delivery of goods must fully comply with all provisions of these requirements and the specifications including time, delivery and quality. Nonconformance shall constitute a breach which must be rectified prior to expiration of the time for performance. Failure to rectify within the performance period will be considered cause to reject future deliveries and cancellation of the contract by Harris County without prejudice to other remedies provided by law. **Where delivery times are critical, Harris County reserves the right to award accordingly**.

RECYCLED MATERIALS

Harris County encourages the use of products made of recycled materials and shall give preference in purchasing to products made of recycled materials if the products meet applicable specifications as to quantity and quality. Harris County will be the sole judge in determining product preference application.

SCANNED OR RE-TYPED RESPONSE
If in its response, offeror either electronically scans, re-types, or in some way reproduces the County's published proposal package, then in the event of any conflict between the terms and provisions of the County's published proposal package, or any portion thereof, and the terms and provisions of the response made by offeror, the County's proposal package ***as published*** shall control. Furthermore, if an alteration of any kind to the County's published proposal package is only discovered after the contract is executed and is or is not being performed, the contract is subject to immediate cancellation.

SEVERABILITY
If any section, subsection, paragraph, sentence, clause, phrase or word of these requirements or the specifications shall be held invalid, such holding shall not affect the remaining portions of these requirements and the specifications and it is hereby declared that such remaining portions would have been included in these requirements and the specifications as though the invalid portion had been omitted.

SILENCE OF SPECIFICATIONS
The apparent silence of specifications as to any detail, or the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and that only material and workmanship of the finest quality are to be used. All interpretations of specifications shall be made on the basis of this statement. The items furnished under this contract shall be new, unused of the latest product in production to commercial trade and shall be of the highest quality as to materials used and workmanship. Manufacturer furnishing these items shall be experienced in design and construction of such items and shall be an established supplier of the item proposal.

SUPPLEMENTAL MATERIALS
Offerors are responsible for including all pertinent product data in the returned proposal package. Literature, brochures, data sheets, specification information, completed forms requested as part of the proposal package and any other facts which may affect the evaluation and subsequent contract award should be included. Materials such as legal documents and contractual agreements, which the offeror wishes to include as a condition of the proposal, must also be in the returned proposal package. Failure to include all necessary and proper supplemental materials may be cause to reject the entire proposal.

TAXES
Harris County is exempt from all federal excise, state and local taxes unless otherwise stated in this document. Harris County claims exemption from all sales and/or use taxes under Texas Tax Code §151.309, as amended. Texas Limited Sales Tax Exemption Certificates will be furnished upon written request to the Harris County Purchasing Agent.

TERM CONTRACTS
If the contract is intended to cover a specific time period, the term will be given in the specifications under SCOPE.

TERMINATION
Harris County reserves the right to terminate the contract for default if offeror breaches any of the terms therein, including warranties of offeror or if the offeror becomes insolvent or commits acts of bankruptcy. Such right of termination is in addition to and not in lieu of any other remedies which Harris County may have in law or equity. Default may be construed as, but not limited to, failure to deliver the proper goods and/or services within the proper amount of time, and/or to properly perform any and all services required to Harris County's satisfaction and/or to meet all other obligations and requirements. Harris County may terminate the contract without cause upon thirty (30) days written notice.

TERMINATION FOR HEALTH AND SAFETY VIOLATIONS.
Harris County has the option to terminate this contract immediately without prior notice if offeror fails to perform any of its obligations in this contract if the failure (a) created a potential threat to health or safety or (b) violated a law, ordinance, or regulation designed to protect health or safety.

TITLE TRANSFER
Title and Risk of Loss of goods shall not pass to Harris County until Harris County actually receives and takes possession of the goods at the point or points of delivery. Receiving times may vary with the using department. Generally, deliveries may be made between 8:30 a.m. and 4:00 p.m., Monday through Friday. Offerors are advised to consult the using department for instructions. The place of delivery shall be shown under the "Special Requirements/Instructions" section of this proposal package and/or on the Purchase Order as a "Deliver To:" address.

WAIVER OF SUBROGATION

Offeror and offeror's insurance carrier waive any and all rights whatsoever with regard to subrogation against Harris County as an indirect party to any suit arising out of personal or property damages resulting from offeror's performance under this agreement.

WARRANTIES

Offerors shall furnish all data pertinent to warranties or guarantees which may apply to items in the proposal. Offerors may not limit or exclude any implied warranties. Offeror warrants that product sold to the County shall conform to the standards established by the U.S. Department of Labor under the Occupational Safety and Health Act of 1970. In the event product does not conform to OSHA Standards, where applicable, Harris County may return the product for correction or replacement at the offeror's expense. If offeror fails to make the appropriate correction within a reasonable time, Harris County may correct at the offeror's expense.

VENDORS OWING TAXES OR OTHER DEBTS

Pursuant to TX Local Government Code 262.0276, Harris County Commissioners Court has adopted a policy which requires that vendors' taxes and other Harris County debts be current as of the date bids/proposals are due. Proposers with delinquent county taxes or other county debts on the due date will not be eligible for award. Whether or not a vendor's taxes are delinquent will be determined by an independent review of the Tax Office records. Prior to submitting an offer, vendors are encouraged to visit the Tax Office website at www.hctax.net, set up a portfolio of their accounts and make their own initial determination of the status of their tax accounts. Vendors who believe a delinquency is reflected in error must contact the Tax Office to correct any errors or discrepancies prior to submitting their offer in order to ensure that their offer will be considered. Furthermore, if, during the performance of this contract, a vendor's taxes become delinquent or a vendor becomes otherwise indebted to Harris County, Harris County reserves the right to provide notice to the Auditor or Treasurer pursuant to Texas Local Government Code §154.045. This policy is effective for all bids/proposals due on or after November 1, 2009.

SPECIAL REQUIREMENTS/INSTRUCTIONS

The following requirements and instructions supersede General Requirements where applicable.

VENDOR INSTRUCTIONS

Responses to this Request for Proposal (RFP) shall be formatted and organized in the following order for consistency and easy screening:

- All proposals must be typed, single spaced, and printed single-sided on 8 ½" by 11" paper.
- One original, **clearly marked "ORIGINAL"**, and six (6) copies, **clearly marked "COPY",** must be submitted in separate three-ring, loose-leaf binders with identification of vendor, the job number as located on the RFP cover sheet, and the RFP title on the front cover.
- The complete proposal response must be sealed in an envelope or box for delivery to the Office of the Harris County Purchasing Agent per instructions in the Proposal Returns paragraph of the General Requirements section.
- All documents must be labeled with vendor's name and the job number. Any response received by the Office of the Harris County Purchasing Agent that is not identified on the outside with the job number will be at risk for rejection.
- Each section of vendor's response should start on a new page. A tabbed divider page marked with the section number should separate each section.
- Prepare a Table of Contents for the proposal being submitted and place it before Section I. The Table of Contents must list Sections I-VI and the contents of each section.

Section I: **RFP Cover Sheet, Transmittal Letter, Residence Certification (Attachment a), Insurance (Attachment e), and signed Addenda (when applicable; see Addenda under General Requirements)** – The transmittal letter should include:

- Company name and address; name, title, email, telephone and fax number of person(s) to be contacted for clarifications or additional information regarding proposal;
- Name, title, email, telephone and fax number of person authorized to contractually obligate vendor's company with proposal and any future negotiations; and
- A brief statement summarizing vendor's understanding of the project and relevant experience

Section II: **Scope of Service/Narrative of Proposed Services**

- Describe your firm's philosophy, approach(es) and preferred methods for meeting requirements and/or deliverables in the Specifications.
- Provide the greatest amount of meaningful detail possible to describe the proposed products/services. Indicate if vendor can meet the specifications, or if the specifications can be met only under certain conditions or circumstances. If vendor is not able to meet the specification, briefly explain why, noting any concerns or issues Harris County should be aware of.
- Provide a timeline indicating deliverables, vendor responsibilities and resources needed from Harris County.

Mere reiterations of specifications are strongly discouraged, as they do not provide insight into vendor's ability to meet the specifications.

SPECIAL REQUIREMENTS/INSTRUCTIONS (CONTINUED)

Section III: **Pricing Information** – See PRICING/DELIVERY INFORMATION page for instructions.

Section IV: **Organizational Information/Qualifications**

- Vendor's history, background and principal officers
- Company organization chart
- Description of project team organization; names and resumes of team members

Section V: **Legal Documents** – Include any standard agreement(s) and/or contracts(s) associated with vendor's response.

Section VI: **Miscellaneous** – State exceptions to any of the requirements in this RFP, if any. Company brochures, marketing materials, or any other information vendor deems appropriate to the RFP response may be included in this section.

Harris County will not be liable for any costs incurred by vendor in preparing a response to this RFP. Vendors submit proposals at their own risk and expense. Harris County makes no guarantee that any products or services will be purchased as a result of this RFP, and reserves the right to reject any and all proposals. All proposals and accompanying documentation will become the property of Harris County. All proposals are open to negotiation.

Vendor is expected to examine all documents, forms, specifications, and all instructions. Failure to do so will be at vendor's risk.

At and after opening, proposals will NOT be part of the public record and subject to disclosure, but will be kept confidential until time of award and execution of an agreement. When an award is made and an agreement is executed, proposals are subject to review under the "Public Information Act". To the extent permitted by law, vendors may request in writing non-disclosure of confidential data. Such data shall accompany the proposal, be readily separable from the proposal, and shall be CLEARLY MARKED "CONFIDENTIAL". For those portions identified as confidential by vendor, Harris County must rely on advice, decisions and opinions of the Attorney General of the State of Texas relative to the disclosure of data or information.

EVALUATION PROCESS

All proposals will be examined by an evaluation committee consisting of various Harris County Juvenile Probation Department personnel and Harris County Purchasing.

Proposals that do not conform to the instructions or which do not address all the services as specified may be eliminated from consideration. However, Harris County, reserves the right to accept such a proposal if it is determined to be in the best interest of Harris County.

While Harris County appreciates a brief, straightforward, concise reply, the proposer must fully understand that the evaluation is based on the information provided. Accuracy and completeness are essential. Omissions, ambiguous and equivocal statements may be construed against the proposer. The

proposal response may be incorporated into any contract which results from this RFP, and vendors are cautioned not to make claims or statements it is not prepared to commit to contractually. Failure of vendor to meet such claims will result in a requirement that vendor provide resources necessary to meet submitted claims.

Harris County Purchasing may initiate discussions with selected vendors; however, discussions may not be initiated by vendors. Harris County Purchasing expects to conduct discussions with vendor's representatives authorized to contractually obligate vendor with an offer. Vendors shall not contact any Harris County personnel during the RFP process without the express permission from the Office of the Harris County Purchasing Agent. Harris County Purchasing may disqualify any vendor who has made site visits, contacted Harris County personnel or distributed any literature without authorization from Harris County Purchasing.

All correspondence relating to this RFP, from advertisement to award shall be sent to the Harris County Purchasing. All presentations and/or meetings between Harris County and vendor relating to this RFP shall be coordinated by the Harris County Purchasing.

Selected vendors may be expected to make a presentation/product demonstration to an evaluation committee. Proposals, vendor presentations and product/service evaluations may develop into negotiating sessions with vendor(s) as selected by the Evaluation Committee. Harris County expects to conduct negotiations with vendor's representatives authorized to contractually obligate vendor with an offer. If vendor is unable to agree to contract terms and conditions, Harris County reserves the right to terminate contract negotiations with that vendor and initiate negotiations with another vendor. In addition to a presentation, visits by the Evaluation Committee to representative vendor client sites may be conducted where the proposed solution can be demonstrated in a production environment.

EVALUATION CRITERIA

Award shall be made to the responsible vendor whose proposal is determined to be the best evaluated offer resulting from negotiations and taking into consideration all aspects of proposal impact items and the following in order of relative importance:

- Project plan for implementation
- Manufacturer Partner status and resources available for implementation and support
- Professional qualifications and experience of vendor and its staff with a minimum of four (4) years of relevant experience and demonstrated success in providing the services requested in this RFP;
- Turnaround time for services requested; ability to complete system implementation and cutover within sixty (60) days of contract award and issue of Purchase Order.
- Pricing;
- Vendor's professional reputation for integrity and compliance with state and federal law, including having the appropriate license to do business in Texas;
- Past performance history with Harris County (if applicable);
- Experience based on references submitted with vendor's proposal; and
- Overall quality of vendor's proposal.

SPECIAL REQUIREMENTS/INSTRUCTIONS (CONTINUED)

Submission of a proposal implies vendor's acceptance of the evaluation criteria and vendor's recognition that subjective judgments must be made by the Evaluation Committee.

AWARD

Harris County anticipates awarding to a single vendor. However, Harris County reserves the right to award to more than one vendor if in the best interest of Harris County.

No award can be made until approved by Harris County Commissioners Court. This RFP does not obligate Harris County to the eventual purchase of any product/service described, implied or which may be proposed. Progress toward this end is solely at the discretion of Harris County and may be terminated at any time prior to execution of an agreement.

LEGAL DOCUMENTS

Vendor should submit any agreement for products/services which may be required by vendor's organization to enter into a contract with Harris County. The awarded vendor will be required to execute an agreement with Harris County which finalizes the terms and conditions set forth in vendor's proposal, best and final offer, and any negotiations between vendor and Harris County. The agreement is subject to review and amendment by the Harris County Attorney's Office.

INVOICES

Vendor shall submit an invoice upon completion of each deliverable. Deliverables will be considered complete only upon written acceptance by Harris County. Each invoice shall include deliverable(s) completed and the price for each. No charges may be billed to Harris County unless such costs are explicitly included in the agreement.

CONTRACT TRANSITION

In the event services end by either contract expiration or termination, it shall be incumbent upon vendor to continue services, if requested by Harris County Purchasing, until new services can be completely operational. Vendor acknowledges its responsibility to cooperate fully with the replacement vendor and Harris County to ensure a smooth and timely transition to the replacement vendor. Such transitional period shall not extend more than ninety (90) days beyond the expiration/termination date of the contract, or any extension thereof. Vendor shall be reimbursed for services during the transitional period at the rate in effect when the transitional period clause is invoked by Harris County. During any transition period, all other terms and conditions of the agreement shall remain in full force and effect as originally written.

SPECIFICATIONS

Furnish and Upgrade Surveillance System with Internet Protocol Based Closed Circuit Television System for the Harris County Juvenile Probation Department

SCOPE

Harris County is requesting proposals from qualified security electronics vendors to upgrade the current surveillance system to an Internet Protocol (IP) based Closed Circuit Television (CCTV) System for the Harris County Juvenile Probation Department (JPD). Project includes the replacement of the existing video surveillance analog closed circuit television (CCTV) system which includes cameras, multiplexer, DVR units, sub-system; with upgrade and integration of the existing HMI programming on the access control system to provide better functionality, improve safety and security and provide user training and ongoing system support.

Vendors are encouraged to review this entire Request for Proposal (RFP) upon receipt. Questions regarding this RFP, including clarification of the information or instructions contained herein must be submitted to Wird Brown, Jr. via email at wird.brown@pur.hctx.net no later than December 14, 2012. Subsequently, a response to all questions received during this period will be issued as an addendum.

RENEWAL OPTION (MAINTENANCE ONLY)

Harris County may consider four (4) one-year renewal options, renewable one year at a time, based upon the same terms, conditions and pricing as the original year. Renewal is subject to approval by Harris County Commissioners Court. Once renewal options are exhausted, the contract must be rebid. Harris County reserves the right to rebid at any time as is in its best interest and is not automatically bound to renew.

MANDATORY PRE-PROPOSAL CONFERENCE AND SITE VISIT

A Mandatory Pre-Proposal Conference and Site Visit will be held on December 28, 2012 at 10:00 a.m. at the Harris County Juvenile Justice Center at 1200 Congress, Houston, Texas 77002. **Attendance is MANDATORY** in order to have a better understanding of the requirements of this RFP and to be eligible to respond to RFP. All questions must be emailed to wird.brown.pur.hctx.net before December 21, 2012 at 4:00 p.m. **Responses from vendors not attending the Mandatory Pre-Proposal Conference will not be considered.** Vendors who are subcontractors to a prime vendor are not required to attend this meeting.

Vendors must register for the Mandatory Pre-Proposal Conference and Site Visit by emailing wird.brown@pur.hctx.net and providing the names of attendees and company name before December 21, 2012. Persons with disabilities requiring special accommodations should contact Wird Brown, Jr. at 713-755-5728 at least two (2) days prior to the pre-proposal conference.

The Mandatory Pre-Proposal Conference will be followed immediately by a site visit. It is the responsibility of the vendor to conduct a thorough inspection of the facilities and verify that Harris County facilities and equipment are sufficient to enable vendor to provide services as requested, meeting or exceeding the RFP specifications.

SPECIFICATIONS (CONTINUED)

BACKGROUND

Harris County is the nation's third most populous county with nearly 4.1 million (4,070,989) according to 2009 estimates by the U.S. Census bureau. Harris County has a larger population than 24 states. The city of Houston is the county seat.

The Harris County Juvenile Justice Center (JJC) is located at 1200 Congress Houston, Texas 77002. The building houses a secure juvenile detention facility, administrative offices and court services operations of the Harris County Juvenile Probation Department.

The Juvenile Detention Center (JDC) is situated within the Harris County Juvenile Justice Center (JJC). The JDC is a secure 24/7 facility. It provides short-term housing for youth ages 10 through 17 whose circumstances require their detainment pending an appearance in Juvenile Court and for youth pending administrative processing. The JDC has single room housing capacity for 250 youth. The facility is located in the east wing of the Juvenile Justice Center wherein youth housing and activity areas encompass six (6) floors.

The facility make-up is as follows:

- Multi-purpose activity rooms
- Medical Services operations areas
- Visitation areas and meeting rooms
- Operations control booths
- Staff offices
- Gymnasium
- Intake area
- Corridors
- Hallways
- Lobbies
- Stairwells
- Elevators
- Courtrooms

DEFINITIONS

The following definitions shall apply to this RFP in all sections:

- HCJPD reference in all sections: Harris County Juvenile Probation Department
- JJC reference in all sections: Harris County Juvenile Justice Center
- JDC reference in all sections: Harris County Juvenile Detention Center
- SEC references in all sections: Security Electronics Cabinet
- TSP references in all sections: Transient Surge Protection
- SAD references in all sections: Silicon Avalanche Diodes
- MOV references in all sections: Metal Oxide Varistor
- SAW references in all sections: Surface Acoustic Wave
- DVS references in all sections: Digital Voice System (text to speech)

SPECIFICATIONS (CONTINUED)

- VMS references in all sections: Video Management Software
- ONVIF references in all sections: Open Network Video Interface Forum
- COTS references in all sections: Commercial Off-The-Shelf
- EVM references in all sections: Event Management System

REQUIREMENTS

Vendor shall provide a complete turnkey systems including all software, camera and site licensing, hardware, equipment, peripherals, programming, interfaces with other systems, conduits, boxes, and raceways, power, wire and cable, carpentry, demolition, patching, refinishing, and relocation. Include the cost of all other trades necessary to install the complete system, whether specifically mentioned or not. The project will entail the following primary work tasks:

- Removal of existing cameras and associated hardware
- Installation of IP video cameras
- Installation of video view and management hardware
- Installation and configuration of CCTV system software
- Integration of CCTV system software with existing access control system and function processes
- Provide user training of the CCTV system upon completion of system installation
- Provide CCTV system Harris County documentation of system's operation, design and architecture.
- Successfully deliver an efficient and reliable CCTV system to HCJPD

Vendor will communicate and coordinate the various work tasks of this project with Harris County Juvenile Probation, Harris County Information Technology Center, and any other Harris County Departments that may have involvement/ oversight responsibility for this CCTV system project. Additionally, vendor shall work cooperatively with other vendors that may be engaged to deliver related components of the CCTV system.

Specifications presented herein represent the Harris County vision for type of CCTV system that meets the needs of HCJPD. Vendors may propose options and innovations that meet, extend, improve or add relevant functionality to the technical and functional specifications discussed in the RFP. The CCTV System submission must:

- Meet Harris County's technical and functional requirements
- Integrate with the existing security access door system
- Meet industry standards
- Be affordable
- Be reliable
- Be sustainable

All vendors that can meet and/or exceed these requirements are encouraged to respond to this RFP.

All work performed in the JDC shall be performed in a series of coordinated stages; in a floor-by-floor and area-by-area order so as not to breach facility security protocols, or disrupt operational processes and activities. The safety, security and confidentiality of the JDC juvenile residents must be maintained at 100% compliance with JDC's operational protocols.

SPECIFICATIONS (CONTINUED)

Scope of Work

Vendor shall provide a complete turnkey system including all software, camera and site licensing, hardware, equipment, peripherals, programming, interfaces with other systems, conduits, boxes, and raceways, power, wire and cable, carpentry, demolition, patching, refinishing, and relocation. Vendor should include the cost of all other trades necessary to install the complete system, whether specifically mentioned or not. Services shall include but not be limited to the following:

1. Remove existing analog CCTV and recording system from Harris County Juvenile Justice Center and replace with an IP camera and NVR solution; upgrade and integrate existing software on the access control system with the following:
2. Installation of 258 fixed dome standard definition and megapixel cameras where specified. The cameras are to be installed in the Detention Facility as well as the Administration areas located in the Harris County Juvenile Justice Center. (Exhibit A of this document provides a breakdown of the camera count by floor.)
3. Installation of the Network Video Recorder and software. Install NVR and configure software as specified in RFP. Installation and configuration of video review client software on selected JJC workstations on both administrative and standard view only workstations.
4. Integrate IP camera system with access control system. The existing access control system's PLC will be programmed to access the cameras via a virtual matrix controller to give specified features for the HMI on the touchscreens as outline in the RFP.
5. Upgrade HMI software on the access control system touchscreens. Install Wonderware 10.1 to add specific features on touchscreens and upgrade operating system to OEM Microsoft Windows 7 Professional.
6. Reprogram existing PLCs to enhance functionality specified in RPF. The PLC will need to integrate with the IP camera system, VMC, audio system and access controls.
7. Installation of Virtual Matrix Management software and controllers. Virtual Matrix Controllers are to be installed and configured to access camera locations via touchscreen workstations. The Virtual Matrix Controllers will operate in tandem with the touchscreen workstations.
8. Vendor shall be responsible for providing, installing, programming, troubleshooting, training and warranty service of all security systems devices and cabling, terminal equipment, control and display equipment for a completely operational system.
9. Vendor shall bear all liability and penalties for damages arising from failure to submit equipment that meets the technical specifications of this RFP.
10. Vendor will not be responsible for the video storage system, backbone fiber, PoE switches and cabling to cameras or workstations from PoE switches.

Vendor Requirements

1. Vendor will coordinate the setup and installation of the assigned scope of work associated with this project.
2. Vendor will ensure the installation is in compliance with all applicable professional and regulatory trade codes and standards including those of Harris County and HCJPD.
3. Vendor will be responsible for all Permits and Licenses required from the City of Houston and any other regulatory agencies. Vendor is fully responsible for compliance with these requirements.
4. Vendor must have the necessary licenses and/or registration required by regulatory authorities that qualify vendor to perform the work specified in this project.

SPECIFICATIONS (CONTINUED)

5. Vendor will be required, before the award on the contract, to demonstrate to the HCJPD team that it has the necessary facilities, ability, experience, and financial resources to provide the services specified in this bid in a satisfactory manner.
6. Vendor will be required to work around and/or accommodate on-going operations without disrupting services, utilities or procedures.
7. All vendor personnel should have documented training to meet and exceed the OSHA requirements in safety.
8. All vendor personnel shall possess the appropriate skills, experience, and competence and if applicable, any required certification or license issued by City of Houston/State of Texas specific to the work they will perform.
9. Vendor will develop a turn-key quotation with detailed breakdown of materials and labor to complete the work to cover all aspects of the work to be performed on this project.
10 Vendor shall not use contracted personnel on this project.
11. Vendor will conduct operational demonstration and/or equipment in-service at appropriate milestones to ensure delivery of specified functionality.
12. Vendor costs associated with developing the bid will not be reimbursed by Harris County.
13. Vendor will submit full details on all mounting brackets and equipment, as it must fit within the current room design aesthetics.
14. Vendor will follow Harris County project planning, scheduling and change control processes as applicable to this project.

SECURITY ELECTRONIC EXPECTATIONS

Related Documents – Drawings and general provisions of RFP, including General Conditions and Requirements apply to Equipment and Furnishing sections. The Security Electronics General 2012 series of sections will be referred to in this specification as the "Security Electronics" or "Security Electronics Division".

Summary of Work

1. Vendor shall design, provide and install all conduit, raceway, including junction boxes and standard backboxes with pull strings for all sections of the Security Electronics Division. All conduit/raceway shall meet the requirements as specified and described, including all applicable codes. All security electronics cabling shall be in conduit from the device to the SEC rooms. If cable tray is allowed then the conduit shall be run to within 12" of the tray. Wire shall not be run plenums unless in conduit.
2. Vendor shall provide and install 120VAC hookups to head-end equipment provided by the Security Electronics Division including UPS and emergency power hookups.
3. Vendor shall hookup any lighting, outlet and any other 120VAC switch-legs to utility control panels provided by the Security Electronics Division.
4. All other work (wire, wire installation, terminations and mounting) shall be performed by the systems vendors' own employees. Vendors that cannot provide complete turn-key solutions with their own in-house staff, less conduit, will not be permitted to bid this project. This will give Harris County a "Single Source Responsibility" format.

SPECIFICATIONS (CONTINUED)

5. All non-standard backboxes by the Security Electronics Division.
6. All work performed in all Sections shall be performed in a series of stages floor by floor or area by area in order not to disrupt daily business or institution activities.

Qualifications

1. Vendors shall have renovation and replacement experience, of occupied detention facilities.
2. Vendor shall provide copies of the company license number issued by the state, which signifies they are approved to do security work in the state.
3. Vendor shall provide and include their UL508 Builder/Fabricator file number. Vendors that do not have a UL508 file number listing SHALL NOT be approved to bid this particular project.
4. Provide a list of ten (10) projects that were completed by the submitting vendor. These projects must have been designed to use industrial programmable controllers and touchscreens as described in this specification and applied in a detention security application. The 10 projects should be similar in size, scope, and price to this project. If subcontractors were used by the submitting Systems Vendor, then that project shall not be used or included in the list, as this project is requiring a "Single Source Responsibility" format requiring complete installation by full time employed employees of the submitting Systems Vendor. Harris County will review each project submitted and disallow any project not meeting the above requirements. If the total approved projects do not meet the minimum 10 required, Harris County will not approve the submitting systems vendor.
5. For each project listed provide:
   a. The brand of PLC, Audio, Video and backbone equipment used
   b. Values of the subsystems and total contract price
   c. Technically describe the security components integration with each other
   d. Provide Contact Person Name and Phone Number at each submitted project site that can confirm that the systems vendor performed the installation in an acceptable manner.
   e. List the names and roles of employees on the submitted projects.
6. The names and up to date phone numbers of Harris County, System Engineer and Harris County of all Jail/Detention/Corrections projects installed by the submitting systems vendor, within the last 5 years.
7. Company's history providing detention control systems.
8. Organizational chart with the resumes of individuals.
9. Provide a narrative description of all software to be utilized, network types, and interfaces with other systems. Any custom software that is to be developed by the vendor needs to be described in detail.
10. Provide written confirmation, "Software Assurance Letter", that at the completion of the Factory Acceptance Test, the systems vendor will provide to Harris County, at no charge, custom installation CDs or DVDs where Harris County can take a brand new computer and reload their touchscreen software. Also all ladder-logic used on this project to date, WonderWare runtime files, and any configuration files required to bring the system back up to working order. At the completion of the project, before acceptance from Harris County and the final retainer payment, the systems vendor will provide the software listed above, for the project. If this "Software Assurance Letter" is not included, the submitting systems vendor will not be approved to bid this project.

11. A letter from the Surety Company reflecting the Surety Company's history and experience with vendor providing the Security Electronics and the current bonding limit. Vendors who do not meet these specifications, fail to turn in a valid prequalification, or do not have an acceptable reputation of good service will not be allowed to bid.

System

This Division includes the requirements and operational characteristics for a Security Electronics System which is 100%, integrated with each other component and section of this specification.

Submittals

1. General: Submit the following in accordance with conditions of Security Electronic Expectations.
2. Product data for each type of product specified.
3. Submittal package detailing the Security Electronics system including but not limited to the following:
    a. Deliver a complete working PC station with all graphic maps for this project with all icons functioning for this project. The working touchscreen station shall provide a SIMULATOR, which will allow Harris County to simulate the activation of any and all devices on the project including, but not limited to, intercom call-ins, door status changes, door breach alarms, UPS or surge protector alarms, panic alarms, watch-tour routes and completion results, panel and/or touchscreen shutdowns, camera selections, both manual and automatic call up, task group assignments, automated help screens defining each icon, automated operation and user manual, alarm queue, intercom queue and active window functions. Provide complete operation and navigation for Harris County on this system. Systems which require PLC's as attachments for submittal purposes will not be accepted. Standard "demo" software of partially working systems with graphics from another project will not be accepted. At the end of 1 month's review Harris County shall return the computer to vendor.
    b. Touchscreen screen graphical layouts on 36" x 24" D-Size drawings.
    c. Equipment cabinet arrangement on 36" x 24" D-Size drawings.
    d. Power circuits on 36" x 24" D-Size drawings.
    e. System riser diagram on 36" x 24" D-Size drawings - including all interconnecting wiring, sizing and color codes. Include manufacturers wire type where required.
    f. PLC configurations on 36" x 24" D-Size drawings.
4. Wiring diagrams, detailing wiring for power, signal and control, differentiating clearly between manufacturers installed wiring and field installed wiring. Identify terminals to facilitate installation, operation, and maintenance.
5. Submit a power system design spreadsheet of power loading for all DC power supply circuits, AC UPS circuits, and AC normal power circuits required by the security system on 36" x 24" D-Size drawings. The spreadsheet shall consist of each circuit/device controlled by the security system with each device's steady state and in-rush load, and a loading summary of all device types for each circuit. This design requires coordination with other subcontractors who provide such equipment as (but not limited to) the door locks and any other device controlled by the system.
6. Any substitutions for specified equipment must be pre-approved by the Engineer at least 10 working days prior to bid date. Provide complete product data, diagrams and block diagrams for substitution. ANY SUBSTITUTIONS THAT WERE NOT PRE-APPROVED will be denied after the bid.

7. Maintenance data for materials and products, for inclusion in Operating and Maintenance Manual specified in Division 1 and Division 16 "Basic Electrical Requirements." Provide complete manual material concurrently with the system submittal and provide updated final version of Manuals one month before completion of construction and final system turnover.
8. All software files (see "Software Assurance Letter" listed above), including custom installation CDs or DVDs where Harris County can take a brand new computer and reload their touchscreen software for each location/control room in the facility. Also all ladder-logic used on this project to date, WonderWare runtime files, and any configuration files required to bring the system back up to working order.
9. Imaging deployment solution and resources needed for quick imaging of all touchscreens and work stations with all necessary software needed for rapid restoration of all touchscreens and work stations in accordance with software End User License Agreement (EULA).
10. Provide proof of license for all software provided on project.

Testing and Demonstration

1. The security automation system, excluding field devices, shall be assembled complete and 100% tested in the security automation system vendors facility. This includes all applicable equipment cabinets, touchscreens, security management systems, intercom head-ends, CCTV head-ends, card access systems, watch tour systems, and any other component deemed necessary by the engineer to be demonstrated. All software for all systems shall be programmed and tested.
2. The testing shall include attachment and proper operation of a typical field device to each and every point of field device connection. While testing is demonstrated to the engineer and Harris County, the engineer may randomly choose field device connection points to be connected and operated. Because the system shall be 100% tested, these field devices shall operate properly.
3. The security automation system vendor shall notify the engineers and Harris County 30 days prior to shipment of the equipment that the test is ready and shall coordinate with them to organize the date of the demonstration.

Delivery, Storage, and Handling

1. Protect all materials and equipment from damage during storage at the site and throughout the construction period. Protect equipment and materials during shipment and storage against physical damage, dirt, dust, moisture, heat, cold, rain, and any foreign substances that may damage the equipment.
2. Prevent damage from rain, dirt, sun and ground water by storing the equipment on elevated supports and covering them on all sides with securely fastened protective rigid or flexible waterproof coverings.
3. Ship and haul all head-end control cabinets with vendor's personnel. Do not trust a common carrier to haul this very sensitive and critical equipment.
4. Install control room security equipment only when control rooms are clean, dry, and ready for the equipment. Control rooms should have all construction work, especially overhead ceiling work, done by the General Contractor before install. Rooms should have functioning security locks provided by GC to secure them from damage and theft.
5. Security electronics rooms shall also be clean, dry and ready for the panels to be moved in. Rooms should have all construction work done, absolutely finished, before equipment is moved in. The rooms should also be lockable with the General Contractor providing the locks/keys.

Installation

1. General: Install system in accordance with National Electric Code (NEC), Near Field Communicators(NFC), International Building Code (IBC), Americans With Disabilities (ADA), Underwriter Laboratories (UL), National Fire and Protection Association (NFPA) 70 and other applicable codes. Install equipment in accordance with manufacturer's written instructions.
2. Wiring Methods: Install wiring in raceway except consoles, desks, and counters.
3. Control Circuit Wiring: Install control circuits in accordance with NFPA 70 and as indicated. Provide number of conductors as recommended by system manufacturer to provide control functions indicated or specified.
4. Wiring within Enclosures: Provide adequate length of conductors. Bundle, lace, and train the conductors to terminal points with no excess. Provide and use lacing bars or tie wraps.
5. Splices, Taps, and Terminations: Make splices, taps and terminations on terminal strips in junction, pull, and outlet boxes, terminal cabinets and equipment enclosures.
6. Identification of Conductors and Cables: Use color coding of conductors or apply wire and cable marking tape to designate wires and cables so all media are identified in coordination with system wiring diagrams.
7. Weatherproofing: Provide weatherproof enclosures for items to be mounted outdoors or exposed to weather.
8. Repairs: Wherever walls, ceilings, floors, or other building finishes are cut for installation, repair, restore, and refinish to original appearance.

Grounding

Provide equipment grounding connections for interconnections systems as indicated. Tighten connections to comply with tightening torques specified in UL Standard 486A to assure permanent and effective grounds.

Field Quality Control

1. Manufacturer's Field Services: Provide services of a factory authorized service representative to supervise the field assembly and connection of components and the pre-testing, testing, and adjustment of the system.
2. Pre-testing: Upon completing installation of the system, align, adjust, and balance the system and perform complete 100% pre-testing of all devices. Determine, through pre-testing, the conformance of the system to the requirements of Drawings and Specifications. Correct deficiencies observed in pre-testing. Replace malfunctioning or damaged items with new and retest until satisfactory performance and conditions are achieved.
3. System Validation: Upon completion of Pre-testing, notify Harris County a minimum of ten (10) days in advance, of acceptance test performance schedule and conduct tests of all devices in his presence. Provide a complete step by step written record of test results which shall be turned over to Harris County along with the As-built documentation. This process shall be known as the "System Validation".
4. Operational Test: Perform an operational system test to verify conformance of system to these specifications.
5. Inspection: Make observations to verify that units and controls are properly labeled and interconnecting wires and terminals are identified.

6. Retesting – Re-certify deficiencies indicated by tests and completely retest work affected by such deficiencies at vendor's expense. Verify by the system test that the total system meets the Specifications and complies with applicable standards.

Quality Assurance

1. Installer Qualifications: Engage an experienced installer who is a factory authorized service representative to perform the work in this section.
2. Electrical Component Standard: Components and installation shall comply with NFPA 70, "National Electric Code."
3. Electronics Industries Association (EIA) Compliance: Comply with the Electronics Industries Association standards.
4. Compliance with Local Requirements: Comply with the applicable building code, state and local ordinances, and regulations and the requirements of the authority having jurisdiction.

PRODUCTS

General

1. Acceptable manufacturers – See individual sections
2. NFPA Compliance: Provide systems conforming to the requirements of the NFPA 101, "Life Safety."
3. UL Listing and Labeling: Provide components specified in the individual sections that are listed and labeled by UL/UR.
4. Nationally Recognized Testing Laboratory Listing and Labeling (NRTL): Provide system and components specified that are listed and labeled by an NRTL. The term "NRTL" shall be defined in OSHA Regulation 1910.7.
5. Single Source Responsibility: Obtain components from a single source vendor who assumes responsibility for compatibility for system components furnished and provides complete turn-key installation to maintain the Single Source Responsibility format.

Product Models

If any product model numbers in this specification cease to exist, go out of production, or are unobtainable then the latest and greatest model from that manufacturer should be purchased at no extra expense to Harris County.

Transient Surge Protection

Transient surge protection is required for all systems/sections of the Security Electronics Division.

1. All Transient Surge Protection (TSP) devices installed shall utilize Silicon Avalanche Diodes (SAD) as the primary means of protection. Secondary protection shall be SAD or MOVs. Each protection circuit shall be independent of each other and neither circuit shall short to ground on clamping transient surges.
2. Each 120VAC circuit or feeder shall be provided with a TSP device.
3. Each metallic conductor(s) entering or leaving the building shall be provided with a TSP device.
4. Each TSP device shall be provided with a ground connection.
5. Alarm contacts on each TSP device shall be wired as inputs to the security system to annunciate as trouble alarms.

Extra Materials

Deliver products as identified in the individual sections in factory containers. Materials are to be stored in a clean dry space, in original containers. Protect products from fumes and construction traffic. Handle carefully to avoid damage.

EXECUTION

System Validation

1. Train Harris County's maintenance personnel in the procedures and schedules involved in operating, programming, troubleshooting, servicing, and preventative maintenance of the system. Provide a minimum of forty (40) hours training on site which should include sixteen (16) hours for maintenance, sixteen (16) hours for general user and eight (8) hours for administration use.
2. Schedule training with Harris County through Harris County, with at least seven days advance notice.
3. Video record all training sessions. Have sessions professionally edited with chapters, menus and sub categories. Provide two (2) DVD's to Harris County of the finished sessions.
4. Occupancy Adjustments: When requested by Harris County within one year of date of Substantial Completion, provide on-site assistance in adjusting levels, resetting matching transformer taps, and adjusting controls to suit actual occupied conditions. Provide up to two visits to the site for this purpose.

Cleaning and Protection

Prior to final acceptance, clean all system components and protect from damage and deterioration both new and reused equipment.

As-Built Documentation

1. At the end of the project provide to Harris County to deliver to Harris County, 6 sets of D-size "as-built" systems drawings for every system in the Security Electronics Division. Drawings in Drawing Exchange Format (DXF) format should also be delivered on 2 DVD disks which shall be marked clearly with project name, system, and company information.
2. Post-bid supplied information shall be submitted under Division 1, a complete system description including number and manufacturer of all equipment required for a complete Security Electronics system as described in these specifications. Include all Harris County supplied equipment, wire, and cables pertaining to or interfacing to this system.

Warranty / Maintenance Service

1. Warranty / Maintenance Service Contract: Provide maintenance and warranty of systems and equipment for a period of 36 months commencing with Substantial Completion, using factory-authorized service representatives.
    a. Warranty/Basic Services: Systematic, routine maintenance visits on a monthly basis at times coordinated with Harris County. In addition, respond to warranty service calls within 24 hours of notification of system trouble. Adjust and replace defective parts and components with original manufacturer's replacement parts, components, and supplies.

b. Network Service: Provide the ability to make changes or modifications, provide service or monitor touchscreen or PLC activity. Provide network access to the facility to allow upgrades, changes, modifications, troubleshooting and status updates. Provide at no cost to Harris County, an internet connection through Mobile Satellite or an ISP for the period of 3 year after acceptance by Harris County. The connection shall be no less than 512K upload and 512K download. Connections which do not provide 512k symmetrical will not be accepted and the SEC shall subscribe to the necessary service to allow 512K/512K. This is to assure that changes or modifications are done with the least amount of downtime. The service shall be a Virtual Private Network (VPN) connection to the SEC's office and shall be disconnected at Harris County end until it is needed by the SEC for service, upgrades or modifications. Use of Harris County's new or existing voice/fax/internet/network or modem lines will not be accepted. Connections which cannot be disconnected will not be accepted. Provide pc Anywhere, VNC, Remote Desktop or pre-approved equal software on all Touchscreens, Fileservers and ADS machines to allow the SEC to view service or modify features per Harris County's request.
c. Provide a Software Deployment Method on the Touchscreen/PLC systems that will notify the control room officer that an UPDATE is available and waiting for deployment via a dialog box. The officer will have the option to accept the UPDATE or to DELAY the UPDATE. If the DELAY option is selected, the dialog box will be hidden and will reappear after a preset time has expired.
d. Additional Services: Perform services within the above 36 month period not classified as routine maintenance or as warranty work as described in Division 1 Section "Warranties and Bonds" when authorized in writing. Compensation for additional services must be agreed upon in writing prior to performing services.
e. Renewal of Maintenance Service Contract: No later than 60 days prior to the expiration of the maintenance services contract, deliver to Harris County a proposal to provide contract maintenance and repair services for an additional one-year term. Harris County will be under no obligation to accept maintenance service proposal.
f. The warranty shall exclude Acts of God, lighting strikes (as long as grounding and surge protection specifications were adhered to), officer abuse or any unnatural abuse Harris County.
g. Software upgrades or enchantments necessary for functionality and security both out of box software and custom solutions are to be performed when necessary at no cost to Harris County throughout warranty period.

CCTV SYSTEM SPECIFICATIONS

Summary of Work

1. Vendor shall provide a complete and fully operational IP based CCTV system. All equipment and materials used shall be standard components, regularly manufactured, regularly utilized in the manufacturer's system.
2. All inside cameras shall be IP based powered by POE. External cameras shall be IP based with environmental housings.
3. CCTV system will be completely interfaced with the Security Electronics for camera callup on spot/assessment monitor(s), integrates on screen video display and information sharing.
4. The video system shall provide Harris County with remote visibility into and out of the facility. Along with this, the system shall also record camera images to provide a track record of past video of the inside the building.

SPECIFICATIONS (CONTINUED)

5. All work performed in all Sections shall be performed in a series of stages floor by floor or area by area in order not to disrupt daily business or institution activities.

PRODUCTS

Video Management Software – General

1. The Video Management Software (VMS) shall meet the requirements of business and government surveillance applications. The software shall be unique and power a series of Network Video Recorders, IP Cameras and Workstations. The software shall provide a complete and comprehensive application for the operation and maintenance of a video surveillance system. It shall provide full live digital video surveillance over a standard 100/1000Base-T network by the use of a graphical user interface (GUI) incorporating video display areas, toolbars, control palettes, and interactive site map displaying system components.
2. The software shall be available in two versions. One version shall provide full functionality except for recording capability. The second version shall have full functionality plus recording capability. Both versions of the software shall also be available either as a software package or preloaded in a workstation.
3. The software shall offer network connectivity to other family components and share all video and control data over the network using standard network protocol. The number of network-connected components shall only be limited by the number of assigned IP addresses.
4. The software shall provide an open platform that allows integration with ONVIF compliant commercial off-the-shelf (COTS) devices, such as: IP cameras, and IP edge devices, including standard resolution and megapixel cameras, from numerous industry-leading manufacturers. It shall support Unicast or Multicast according to the edge device capability.
5. The software shall run on a COTS workstation with a minimum of 2.66 GHZ dual-core processor, 2 GB of RAM and 5 GB of disk space. The software shall run on the Microsoft Windows 7 Professional 32 or 64-bit, Windows Server 2003 or 2008 systems.
6. The software, without any degradation to video quality, shall simultaneously offer:
   a. 16-channel continuous video playback.
   b. 16-channel video playback transmission to the network.
   c. 16-channel continuous video receiving from the network.
   d. Recording of up to 95 cameras on a single NVR, depending on resolution, quality and fps settings.
   e. User selectable video archiving of pre-existing recordings.
   f. Video export in AVI, MPEG-4 or Xvid and viewable on a standard DVD and media player.
   g. Video archives in a verified, secure CD or DVD format.
   h. Support for the GUI to display on a widescreen monitor (16:9/16:10).
7. The software shall offer features including the simultaneous display, playback, distribution and archive of multiple channels of video. Cameras shall be the primary input devices. Each channel of video shall have the capability of being displayed, played back, distributed and archived simultaneously across several servers and clients across the network. The software shall allow recording (version dependent) and viewing at different frame rates (fps).

SPECIFICATIONS (CONTINUED)

8. A web-based interface shall be provided to access the VMS from any standard web browser enabled device. It shall provide live viewing, playback controls. The software shall allow control of a Network Video Recorder (NVR) using a administrative networked workstation with administrative authorization to shall have the ability to start or stop video, play back video, adjust all aspects of camera, and recording functionality.
9. The software shall support playback from the main screen without losing live video viewing in the following formats:
    a. Quick playback – by using a right mouse-click, the user will be able to select and launch playback for a specific camera in a pre-defined number of seconds before the live image. The playback window will open adjacent to the live one.
    b. Playback from time – shall allow setting the playback to start from a specific date, time and database on the network. This shall allow playing back the same camera several times.
10. The software shall be provided on CD format in a suitable case.
11. The Users shall have the ability to generate Events History Reports which shall contain all information related to an event. The user shall have the option to display the reports in either a list or thumbnail view. The reports shall contain camera and site names and event dates and times. Selecting an event in either view will enable user to play back video for the event. Controls shall be provided to specify whether playback should begin when the event occurred or up to 30 minutes prior to the event occurring. The user shall have option to add notes about the event to the database and to save a snapshot (jpg) of the event for reference purposes. The system shall also display information regarding edits, if any were made to the video.
12. Acceptable Manufacturers – Vicon IP system based on ViconNet 6.6 with VN-WS-SW (software only), VN-WS-PC (preloaded workstation) or VN-NVR-SW (software only), VN-NVR-XXX (preloaded NVR), Virtual Matrix System software shall be Vicon's Model VMDC-SW (software only, VMDC-2, 4 or 6 (preloaded tower PC with 2, 4 or 6 monitor outputs or VMDC-2, 4 or 6 R (preloaded rack PC with 2, 4 or 6 monitor outputs)

Video Management Software – Setup, Configuration and Security

1. The software shall offer a full multi-user authorization login application. This application shall offer levels of authorization based on defined sites and functions. In addition, a full setup utility shall be available for the Administrator to configure authorizations. A user shall be able to log in by default, as an Administrator or Guest. Guest authorization shall be configurable for specific system operations. Authorization rights setup shall be performed using the Site Authorization screen. Group rights shall be available to configure by specific site. Rights shall provide authority to perform all system functions. The software shall offer a full multi-user authorization process as follows:
    a. User groups shall be created once globally and shall function in all components connected to the network.
    b. Users shall be created once globally and shall be given rights to particular groups.
    c. Groups shall be authorized and given specific access to each unit, permitting "function-specific" profiles.
    d. Users created and authorized for each unit shall be able to log in to any recorder and workstation and automatically have their group rights for that machine follow them.
    e. There shall be no virtual limit on the number of groups and users that can be authorized in the software on NVRs.

f. The number of groups and users authorized on the IP cameras and encoders/decoders will be limited to 20 groups and 100 users.
g. The software shall allow for each group to be authorized or denied access, per component, to: Login, Logout, Site List, Setup, Network Setup & Site Name, User and Group Management, Site Authorization, Auto Login, Macro Create-Edit, Alarm Setup, Authentication Settings, Camera, and Device Setup, Pre & Post Alarm, Storage Database Utilities, Auto Record, Exit to OS, RS-232/422/485 Setup, Picture Quality and Resolution Setup, Registration, Manual Record and Playback Setup, Central Failure Notification, Recording Verification, Auto/Manual fps Setup, Texting and Email, Display Settings, Remote cameras and alarm names, Data storage allocation, Low Bandwidth, Language Translation Utility (LTU) Setup, Map Sets, Reset Nucleus, Backup and Restore, Settings Summary, Scheduler for Macros, Camera Grouping, I-Onyx and Third Party Cameras, Third Party Format, Video Analytics Engine, Scheduling, display and alarm notification, Remote pre/post alarm recording, Backup utility for setup configuration, Reports.

2. All users created shall be able to log in to any workstation on the system. A user, given appropriate access, shall be able to remotely configure all components connected to the network. The programming shall include the complete operation of the recorders, including but not limited to: Network Settings and Site Name, Site Authorization, Auto Login, Storage Database, Registration, Macro Editor, Schedule for Macros, Alarms, Manual Record and Quality Buttons on Screen, Recording Verification, Authentication, Map Sets, LTU.
3. The software shall permit viewing of live video from any camera connected to any recorder on the network.
4. The software shall allow for duplicate recording over the network (version dependent).
5. The software shall provide the ability to save any event that was tagged as an alarm (video motion detection, video loss or input received from the EVM system to be saved to a separate database, where it cannot be overwritten. The feature shall be named Video Vault.
6. An Archive Wizard shall be provided that simplifies the process of creating archives and saving video to removable media, such as: CD, DVDs or solid-state drives. An embedded player shall be packaged with each archived video clip for playback on any machine.
7. The software shall provide an advanced method for creating and executing extensive software commands. This shall be achieved by the use of macros. Macro configuration shall be defined for recorded cameras, command duration, recording location (version dependent), local viewing, device ID, picture quality, refresh mode, recording rate (fps) (version dependent), related devices (sensors) and alarm activation.
8. Macros shall allow an authorized user to create and schedule software commands that shall include but not be limited to:
   a. Sequencing cameras, including multi-screen displays, in a local and remote recorder.
   b. Execute remote macros existing on recorders currently connected to the network.
   c. Record cameras at different qualities and frame rates from any recorder on the network (version dependent).
   d. Send alarm condition to any recorder and workstation on the network. By the use of macros, an authorized user shall be able to program the destination component of the alarm condition.
   e. Run applications or batch files, such as: open a word processor, spreadsheet program, calculator, media player or start a batch program to run additional tasks.

f. Run an audio file on alarm; for example, audible instructions.
g. Send an email, text message, start video or any other task that can be initiated by a batch file in response to a Central Failure Notification (CFN) or Recording System Verification (RVS) notification.
h. An authorized user shall be able to program and execute macros remotely without the need to be physically located at the recorder that the macros will be programmed on.
i. The Schedule/Macro button shall allow the running of preconfigured combinations of camera and sensor routines.
j. Macro scheduling shall include but is not limited to:
    - Days of the week when a macro is active.
    - Start and end time for when a macro is active.
    - If a macro is to run continuously or not.
    - A macro shall be able to run every:
    - 5 min, 10 min, 1/4 hour, 1/2 hour, 3/4 hour, 1 hour, 2 hours, 3 hours, 4 hours, 6 hours, 8 hours, 12 hours.
    - A macro shall be able to be scheduled to run for 1-256 cycles.

9. The network and sites configuration shall allow:
    a. Set up of a System Nucleus and Backup Nucleus. The Backup Nucleus shall maintain an updated backup of all System Nucleus settings for recovery in case of failure. The system shall provide failover and redundancy and be fully operational in the event of a System Nucleus failure. Each device shall have an updated backup table to allow operation should the System Nucleus fail. A Network Settings menu shall provide a comprehensive worksheet for each networked device. When all units have been set up, the resulting connected devices shall define the site.
    b. Site Authorization: Workstation shall be set up using remote recorder or workstation GUI. Site name and authorization shall be established by User and Group. Permissions shall be assigned for all system functions.
    c. Time synchronization of all components on the network.
    d. All appropriate networking features including each server IP, Subnet and Gateway.
10. Device configuration shall have the ability to be configured for system recognition and operation. Valid devices shall be:
    a. Cameras
    b. Sensors
    c. Relays
11. All devices shall be assigned a unique ID number and title descriptor.
12. There shall be a Recording Verification System used to identify and log any recording errors encountered during normal system operation. The log shall be manually reviewed for possible video segment errors earmarked with a Recording Site, Device Name, Date/Time, Verified Site, Macro Name and Error Description stamp. There shall be a Central Failure Notification (CFN) System used to identify all possible site errors. The CFN shall be accessible from only the Nucleus unit. The log shall be in a time/date order and be manually reviewed for errors.
13. There shall be a Site Map feature. It shall allow the installation and configuration of a custom screen map used to identify and access site-installed components (cameras). The map should include text boxes and sub-maps that further define the layout. This utility shall provide full

installation, configuration and editing of maps. Maps should have the ability to be moveable anywhere on the screen.

14. There shall be a Language Translation Utility (LTU). It shall allow a manual translation of the entire GUI into any language that uses varying alpha-numeric character sets. The utility shall also store files to enable changing from one language to another.
15. The system shall provide alarm notification via e-mail, text messaging, and work station text. Macros shall be created to view and record video at preset positions, trigger alarms over the network and send email or text message for alarms or on schedule.
16. Storage Database Utilities shall allow setup and usage of detected hard disks locally. Any networked recorder, workstation or server shall be a candidate to add to the picture database. Once established, any recorder shall use established hard disks for recording data.
17. Alarm Setup: Recorder alarms shall be established by adding detectors and configuring motion detection on video. The triggering of the recorder's detectors shall be used to send alarms to remote units and generate email or text messages. In addition, detectors shall be able to be edited and deleted.
18. Authentication: The video from the recorder's cameras shall be enabled to verify the authentication of the video and present an authentication symbol on the displayed video for both live and recorded playback.

Video Management Software – User Interface

1. The software installed in both recorders and workstations shall be similar in:
    a. Graphical User Interface, therefore an operator shall need to learn only one interface for both control and programming of the system.
    b. Functions, offering the ability to remotely configure most system components from any recorder or workstation.
    c. The application shall display a Main Window and Login Window, where all configuration and operation shall be accomplished.
    d. The login window shall consist of a User Name and Password field.
    e. The user interface shall serve both operators and system administrators. For the operator, the controls shall be laid out in a familiar VCR type control array, with Playback, Stop, fast forward, still, slow motion, etc. right under the viewing panes. The workspace area shall enable the operator to select the number of panes to display, view system activity, select quality levels and perform many other functions without having to drill down through menus or search for these commonly used functions. The interface shall also react to user interaction. The system administrator shall easily access functions such as scheduling macros and producing reports from the toolbar at the top of the Main Window. The Setup button on the toolbar shall provide access to the System Settings menu. The System Settings menu shall provide access to all of the features of the software.

2. The Main Window shall provide the following:
    a. The Site and Device List depicting all recorders, servers and workstations connected to the network.
    b. Within the Site and Device List, each unit shall be depicted with all connected devices such as:
    a. Cameras connected.

c. A multi-screen display area that allows for screen displays of:
   - Single Camera
   - *Quad*
   - *3 x 3*
   - *4 x 4*
   - *6-way*

d. Full screen of any of the above selected multi-screens shall allow for the viewing of the particular multi-screen in full screen mode by hiding the graphical user interface.
e. Access to all available programming menus.
f. On-demand recording of video currently viewed shall allow for the recording of any camera from any recorder connected to the network.

3. The Site and Device List shall provide a physical list of all known network site areas and connected cameras. The cameras shall be represented by graphical symbols. The user shall also have the option of showing the cameras and devices by logical camera grouping instead of the Site List. Components in the Site and Device List shall be selectable and configurable.
4. Viewing of live cameras shall be performed by:
   a. Clicking on the desired camera in the Site and Device List.
   b. "Drag-and-Drop" operation of cameras from the Site and Device List to the appropriate multi-screen space.
   c. "Drag-and-Drop" operation of the recorder from the Site and Device List to the appropriate multi-screen space.
   d. "Drag and Drop" operations from a camera group list to the appropriate multi-screen space.
   e. "Drag and Drop" operations from a graphical map to the appropriate multi-screen space.
5. The Navigator Window shall graphically display recorded video. It shall contain all function buttons necessary to access the video on-screen. These functions include but are not limited to:
   a. A scalable timeline shall be available to define "from" and "to" time/date intervals of video.
   b. Cameras shall be selected from the Navigator List and displayed in the timeline in different colors for video.
   c. The display mode shall be selected from a palette to configure the number of cameras played back.
   d. An "Export Video" button shall be used to create a video clip in the following formats: AVI, MPEG, Xvid of the selected single camera video segment.
   e. A "Museum Search" button shall be available to search selected video segments for "Area of Interest" (AOI) events using a scalable sensitivity setting.
   f A Play button shall be available to display the Main Window with the Video Display Area containing the selected video segments ready for review.
   g. Video retrieval in the Navigator Window shall be performed by:
      - Selecting the Display Mode for required number of cameras.
      - Selecting the device (recorder or workstation) where video was previously stored or archived.
      - Selecting the cameras to be played back.
      - By "Drag-and-Drop," similar to the live view, selected cameras are inserted into the multi-screen displays so that an operator can view a mix of previously recorded cameras and live video on the same screen.

- The timeline shall provide a graphical interface depicting color-coded bars that indicate video previously recorded as well as all alarmed video.
- Video indicator bar shall indicate recording with no sensed motion
- Any recorders on the network shall be capable of playing back, by utilizing the multi-screen displays, a mix of videos previously recorded on any other server on the network, or archived.
- The Navigator Window shall offer the ability to playback cameras:
  - ✓ One by one.
  - ✓ Time synchronized (precise timeline when the cameras were recorded).
  - ✓ By double-clicking any alarm report line or alarm window.

6. Access to programming and more advanced screens shall be done by means of an immobile, permanently docked toolbar located on the top live screen. The toolbar shall provide access to the following major functionality of the system:
   a. The Scheduler/Macro.
   b. Reports.
   c. Setup.
   d. Logout and Shutdown buttons.
7. The operator shall have the ability to launch web pages or any other type of web-based information such as embedded HTML or PDF documents from within the user interface. Along with informational websites such as, internal operating procedures such as operation during emergencies, lockdowns, severe weather, etc. shall be launched and controlled from the VMS system and have pass code protected authorization.
8. Authentication shall be configured using the Authentication Settings screen. Authentication display shall be configured by site and affect the destination video. A check box shall be available to enable video authentication and view the status of the video generated. The video authentication scheme shall utilize a 128 bit MD5 algorithm.

Video Management Software – Video Quality

1. The IP cameras shall employ a compression algorithm based on:
   a. Optimized MPEG-4, JPEG (Normal and Full) and H.264. The software running on the NVRs shall support the algorithms used by the devices.
   b. User selectable levels of resolution (quality) depending on camera not requiring a need to restart the application. It shall be selectable using a 4-position bar from the main screen. There shall be 4 levels of resolution (4 CIF, 2 CIF, CIF, and HCIF) with 2 levels of compression comprising 8 quality levels total, which shall be accessible from the Setup menu selections.
2. User selectable resolution shall include capture sizes (camera dependant) of:
   a. 360 x 122 pixels, 432 x 146, PAL.
   b. 360 x 244 pixels, 432 x 293, PAL.
   c. 720 x 244 pixels, 864 x 293, PAL.
   d. 720 x 488 pixels, 864 x 586, PAL.
   e. 1280 x 720 pixels (0.9 MP)
   f. 1280 x 1024 pixels (1.3 MP)
   g. 1600 x 1200 pixels (2.0 MP)
   h. 1920 x 1080 pixels (2.1 MP)

i. 2048 x 1536 pixels (3.1 MP)
j. 2592 x 1944 pixels (5.0 MP)

Virtual Matrix Display Controller

1. Virtual Matrix Display Controller (VMDC) shall be available for digital video recording management and network software. The VMC shall provide the following capabilities:
   a. Display any IP camera on the network on any monitor on the network.
   b. Allow the use of both 4 x 3 and 16 x 9 monitors.
   c. Allow control of the system from VMDC PC GUI, PLC.
   d. Supports up to 2 monitors per workstation.
   e. Map capability.
2. The VMDC shall be a Vicon VMDC-2 Virtual Matrix Display Controller tower unit.
3. The VMDC shall be equipped with a PS-2 or USB wheel mouse and 101-key keyboard. D. Recommend settings are 1024x768 pixels and 32-bit color.
4. A VMDC PC shall operate in tandem with all touchscreen control stations.
5. All VMDC shall be enclosed to prevent tampering using a computer security enclosure that is lockable. This prevents non-key holders from tampering and port access on all touchscreen control stations.

Fixed Dome Vandalproof Color Camera

Provide quantities and types as shown on plans and as applicable to the mounting location.

1. The fixed dome, color camera shall incorporate a fixed camera/lens combination. The camera domes shall be available as indoor/outdoor models in network (IP). The cameras shall offer in-ceiling mounting or surface-mounting. The cameras shall also have the ability to be mounted to a standard 4 x 4 electrical box. An adapter shall be available for pendant mounting on a standard 1 ½ NPT fitting.
2. The cameras shall be available in color and day/night models. (quantities and types as shown on plans)
3. The color camera shall have a resolution of 560 TVL. Built-in digital noise reduction shall improve image quality in low-light environments. Privacy masking shall provide the ability to mask out selected regions of the screen. A Highlight Mask feature shall mask bright spots in a scene, providing better overall clarity.
4. The cameras shall be constructed with a metal housing with a smoked, high-impact, polycarbonate plastic dome and black mask. All camera models shall be protected with tamper-resistant screws.
5. The IP models shall provide a 100Mbps, TCP/IP Unicast network interface.
6. The cameras shall have an internal heater PoE power option.
7. The camera position shall have a three-axis adjustment, allowing for adjustment of pan (360°), tilt (70° from vertical) and lens rotation (roll), for any angle of view required. A choice of lenses: 3.3 to 12 mm or 9 to 22 mm, shall be offered to match the application range.
8. The camera shall be designed for easy installation and setup. The extensive onscreen display menus shall allow set up of white balance, AGC, backlight compensation, exposure, privacy masks and many other functions.

SPECIFICATIONS (CONTINUED)

IP SD and Megapixel Camera Dome Specifications

1. The indoor fixed camera dome shall incorporate a fixed camera/lens combination. The camera dome shall be available for indoor surface mounting. The high-resolution day/night camera shall be available with an integral 3.3-12 mm or 9-22 mm varifocal autoiris lens. The lenses shall be available motorized to allow for remote configuration of zoom and focus (motorized focus and zoom - MFZ); it shall be zoom scalable so the iris shall automatically adjust to zoom condition. Day/night operation shall be achieved using a built-in IR-cut filter. A clear polycarbonate lower dome that is secured by tamperproof screws shall be included.
2. The camera position shall have a three-direction adjustment, allowing for adjustment of pan, tilt and lens rotation (roll), for any angle of view required.
3. The camera dome shall be powered by Power-over-Ethernet, 24 voltage alternating current (VAC) or 12 Voltage direct current (VDC).
4. The camera dome shall have dual streaming video and support H.264 and M-JPEG (2nd stream only) compression. The camera shall be available in 2 maximum resolutions, VGA (SD, 0.3 megapixels) and 720p (1.3 megapixels).
5. Camera features shall include electronic iris, AGC, BLC, white balance, flip, mirror and motion detection.
6. The camera dome shall meet the FCC requirements for a Class A device. It shall include support for the industry-standard ONVIF interface.
7. The camera dome shall provide a slot for an SD card for local storage.
8. The miniature fixed-position camera dome shall meet or exceed the following design and performance specifications.

Day/Night IP Camera Dome Specifications

- Imaging Device: 1/2.5-inch CMOS sensor
- Max. Resolution: VGA, 720p models
- Shutter Speed: 1/4, 1/10, 1/12.5, 1/20, 1/25, 1/30, 1/60, 1/100, 1/120, 1/240,
- 1/480, 1/960, 1/1024, 1/2,000 sec
- Automatic Gain Control: On/Off selectable
- Signal-to-Noise Ratio: >50 dB
- Sensitivity: VGA: Color: 0.12 fc (1.25 lux);
- B&W: 0.014 fc (0.15 lux),slow shutter On, @f/1.6, 30 IRE
- 720P: Color: 0.07 fc (0.7 lux);
- B&W: 0.007 fc (0.08 lux),slow shutter On, @f/1.4, 50 IRE
- Tilt and Horizontal3-axis adjustment: pan (360°), tilt (90°) and roll (lens Adjustment: may be rotated on its axis 360°)
- Slow Shutter: 2X
- Electronic Zoom: 2 ~ 10X (client software)
- Lens Adjustment: Focus and zoom adjustment; fixed lens, DC iris/P-iris
- motorized lens, iris automatically adjusts to zoom condition
- Focal Length: 3.3-12 mm or 9-22 mm varifocal
- Horizontal Field of View: 3.3-12 mm: 1080p: 76.6°-21°; 720p: 112.6°-21°;
- VGA: 86.1°-23.1°
- 9-22 mm: 1080p: 27.8°-11.5°; 720p: 38.8°-11.5°;
- VGA: 30.9°-12.6°

SPECIFICATIONS (CONTINUED)

Electrical Specifications

1.	Input Voltage:24 VAC, 12 VDC or PoE		
2.	Current (MFZ On/Off):	720p:	24 VAC: 323 mA/462 mA 12 VDC: 404 mA/725 mA
		VGA:	24 VAC: 315 mA/452 mA 12 VDC: 394 mA/709mA PoE: Class 2
3.	Power Consumption (MFZ Off/On):		720p: 4.8 W/8.7 W, VGA: 4.7/8.6 W
4.	Connectors:		Power: 24 VAC/12 VDC screw terminal PoE/Network: RJ-45 Video/Data: RJ-45 Alarm In/Out: terminal block Audio In /Out: jack (audio out requires external amplifier) Slot for SD card Composite output provided for installation (NTSC/PAL selectable)
5.	Radio Frequency Emission Rating		FCC Class A: CE

Environmental Specifications

1.	Operating Temperature:	14° to 122°F (-10° to 50°C)
2.	Humidity:	<90% relative, non-condensing

Physical Specifications

1.	Construction:	Plastic Dome: clear polycarbonate
2.	Dimensions:	Height: 4.4 in. (113mm), Diameter: 4.9 in. (125mm) Dome Diameter: 3.9 in. (100mm) Weight: Appropriately 0.9 lb (400g)

Mechanical Specifications

1.	Camera Mount:	Surface mount
2.	Adjustments:	3 axis adjustment, pan (360°), tilt (90°) and roll/azimuth (360°)

Network Video Specifications

1.	Communication Platform:	Open platform; compatible with ViconNet Video Management System
2.	Compression:	H.264; M-JPEG available on 2nd stream
	LAN Interface:	10 Base-T/100 Base-TX
3	Video Channels	Dual streaming

SPECIFICATIONS (CONTINUED)

4.	Resolution and Frame Rate:	VGA: 640x480, 320x240, 704x480/576,352x240/288; 720p: 1280x720, 1280x720 (Wide), 1280x1024, 1024 x768, 704x480/576, 640x480,352x240/288,320x240; 2.5 fps ~ 30 fps (2.1 ~ 25 fps, PAL)
5.	Web Browser:	Internet Explorer 7.0 and above, Firefox
6.	Users:	Live viewing for up to 10 clients
7.	Image Settings:	Adjustable bit rate; flip and mirror; configurable brightness, contrast, color, hue, sharpness; white balance, AGC; AES; automatic or manual day/night, mode; BLC; digital zoom; motion detection; slow shutter; zoom and focus (motorized lens models)
8.	Supported Protocols:	IPv4, IPv6, TCP, HTTP, HTTPS, UpnP, RTSP/RTP/RTCP, IGMP, SMTP, DHCP, NTP, DNS, DDNS, UDP, ARP.

Certifications - CE, FCC, Class A

Warranty – Three (3) years, parts and labor

Approved Manufacturers

The outdoor fixed color IP dome camera shall be Vicon Industries Model V960D Series, V960D-WN312M and V961D-WN312M or equal

Fixed Dome Vandalproof Color Camera

Provide quantities and types as shown on plans and as applicable to the mounting location.

1. The fixed dome, color camera shall incorporate a fixed camera/lens combination. The camera domes shall be available as indoor/outdoor models in network (IP) and analog versions. The cameras shall offer in-ceiling mounting or surface-mounting. The cameras shall also have the ability to be mounted to a standard 4 x 4 electrical box. An adapter shall be available for pendant mounting on a standard 1 ½ Network Time Protocol (NTP) is fitting.
2. The cameras shall be available in color and day/night models (quantities and types as shown on plans).
3. The color camera shall have a resolution of 560 TVL. Built-in digital noise reduction shall improve image quality in low-light environments. Privacy masking shall provide the ability to mask out selected regions of the screen. A Highlight Mask feature shall mask bright spots in a scene, providing better overall clarity.
4. The cameras shall be constructed with a metal housing with a smoked, high-impact, polycarbonate plastic dome and black mask. All camera models shall be protected with tamper-resistant screws.
5. The IP models shall provide a 100Mbps, TCP/IP Unicast network interface.
6. The cameras shall have an internal heater PoE power option.
7. The camera position shall have a three-axis adjustment, allowing for adjustment of pan (360°), tilt (70° from vertical) and lens rotation (roll), for any angle of view required. A choice of lenses: 3.3 to 12 mm or 9 to 22 mm, shall be offered to match the application range.

SPECIFICATIONS (CONTINUED)

8. The camera shall be designed for easy installation and setup. The extensive onscreen display menus shall allow set up of white balance, AGC, backlight compensation, exposure, privacy masks and many other functions.

Fixed Integrated Camera/Intercom Specifications (CommView)

1. Imaging Device: 1/3-inch CCD 2:1 interlace, NTSC/PAL.
2. Picture Elements: NTSC: 811 (H) x 508 (V) 410,000 pixels: PAL: 795 (H) x 596 (V) 470,000 pixels
3. Sensitivity- Color Model: 0.01 fc (0.0001 lux) with f/1.2 lens at 30 IRE
4. Sensitivity- Day/Night Model: Color: 0.01 fc (0.14 lux) with f/1.2 lens at 30 IRE; B&W: 0.001 fc (0.01 lux) with f/1.2 lens at 30 IRE
5. Video Output: IP
6. Horizontal Resolution: 700 TV lines; 600 TV lines B&W
7. S/N Ratio: 50 dB (AGC off)
8. Synchronization: Internal/External
9. Automatic Gain Control (AGC): Selectable: Off, Low, Middle, High
10. Backlight Compensation: On/Off
11. Flickerless: On/Off
12. Digital Noise Reduction: On/Off
13. Iris Control: Fixed
14. White Balance: Automatic/Manual, Red/Blue Gain Level
15. Shutter Speed: NTSC: 1/60-1/100,000 sec PAL: 1/50-1/100,000 sec
16. Focal Length: 3.7
17. Aperture: f/1.2

Electrical Specifications

1. Input Voltage: 12 DC isolated or PoE.
2. Current: DC 110 mA.

Environmental Specifications

1. Operating Temperature: 7 to 122° F (-5 to 50°C).
2. Humidity: Up to 95% relative, non-condensing
3. Storage Temperature: -40 to 150° F (-40 to 65° C) maximum

Mechanical Specifications

1. Construction: Integrated into 11 gauge 402 stainless intercom faceplate with smoked Lexan plastic lens.
2. Dimensions: Height: 5.5” (140 mm); 7.5” (188 mm) with mounting holes for standard 3 gauge electrical box.
3. Camera Mount: Indoor or outdoor, flush, electrical box mount. Cameras will be mounted to a 3- gauge electrical box without the need for an adapter plate.

Warranty – Three (3) years, parts and labor

EXECUTION

Examination

1. Working Order – Verify that all equipment is in working order and within heat tolerances.
2. Installation – Verify that the equipment has been installed in accordance will all codes and complies with the Security Electronics General Section and Division 16 requirements
3. Confirm and verify all equipment is in a pristine new condition with manufacturers' warranty still intact. Make sure all wiring has been tied down and dressed out to professional standards.
4. Confirm all equipment is clean, wiped off and ready for occupancy and Harris County use.

Closeout

1. In the presence of a Harris County representative, verify that the material and software provided meets this specification. If there are deficiencies and the vendor was at fault or negligent, the vendor is responsible for immediate correction.
2. Training - Verify all training has been completed as is described in Security Electronics General Section.
3 As-Built Documentation – Deliver as-built documents for this section and all sections of the Security Electronics Division. Also deliver all documents, instructions and literature that came with the material in this section.

CCTV REVIEW STATIONS

Summary of Work

1. Vendor shall provide a complete dual monitor solution for four Domain workstations in order to perform administrative tasks using Vicon-Net software.
2. Vendor shall install and configure Vicon-net on to eight Domain workstations in order to perform administrative tasks using Vicon-Net software.
3. All work performed in all Sections shall be performed in a series of stages floor by floor or area by area in order not to disrupt daily business or institution activities.

PRODUCTS

System Requirements

1. The dual monitor solution shall include an ATI Radeon HD 3450 PCIe low profile video card and Dell P1911 LCD wide screen monitor.
2. A backup of each workstation with Vicon-Net software installed and configured shall have a backup DVD and restore image.

CCTV TOUCH SCREEN MONITORS

Summary of Work

1. Vendor shall provide a complete working touchscreen and software interface that shall form a seamless, integrated human machine interface (HMI) with the rest of the Security Electronics System.
2. The Touchscreen and software shall provide Harris County with a flexible, networked, data-logged system for the control and monitoring of the facility. The system shall be a "software" solution allowing for ease of adapting over time as the facility's needs change.
3. All work performed in all Sections shall be performed in a series of stages floor by floor or area by area in order not to disrupt daily business or institution activities.

SPECIFICATIONS (CONTINUED)

PRODUCTS

System Requirements

1. Acceptable Manufacturers - Acceptable manufacturers who have demonstrated, produced, and have a history of developing products that meet the per-qualifications as outlined in part 1.3 in the Security Electronics General section:
2. Touchscreen Control Stations
   a. Touchscreen(s) (refer to plans for quantities and locations):
      - The LCD shall be 24" high resolution (1920 x 1200) non-interlaced with a 74 Hz refresh rate and a dot pitch of 0.31 mm maximum. Touchscreens shall be of the SAW technology with 1200 touch points resolution. Meantime between Failures for the controller shall be greater than 50,000 hours and a touch life in any one location of 20 million touches. Connection to PC shall be USB.
      - The touchscreen driver shall allow the touch area to activate upon release from the touchscreen.
      - The touchscreen must operate simultaneously with a mouse so that the user can use either the touchscreen or the mouse without re-connections, switches, or system re-boot.
   b. Touchscreen Computer (refer to plans for quantities and locations): The computer shall be at a minimum 100% IBM compatible, Intel Core i3 Processor, 1 GB Ram DDR3 1333Mhz, 250 GB hard drive, 8 USB ports, 10/100BaseT Ethernet card, and running Windows 7 Professional. The computer shall also be installed with an audio card for the Digitized Voice System (DVS). All computer requirements are minimums.
   c. The Touchscreen Networking
      - The touchscreen stations shall be connected through a network that complies with requirements for IEEE 802.3ab for 100/1000BaseT Ethernet. 100/1000BaseT is required so that other members of the network are not subject to problems associated with wiring or Ethernet ports of other network members including access to on screen video display from the Vicon-Net system.
      - The programmable logic controller (PLC) shall also be a member of the network and shall communicate directly to all control stations at a minimum standard of 10/100BaseT. All touchscreens shall communicate directly to the each PLC independently of one another, and the failure of no combination of touchscreen(s) shall cause any other to not function. Server configurations where one computer serves as the communications server to the PLC or where a local touch screen can only communicate to the local PLC in the event of a rollover are not acceptable.
3. Touchscreen Configuration Software
   a. Touchscreen Configuration Software: The touchscreen configuration software shall be non-proprietary. It also shall be developed using a standard Windows based industrial software package that is regularly used in industrial applications and 100% compatible with the industrial PLC specified. Wonderware InTouch 10.1 or latest version available or equal.
   b. The configuration or development software must be compatible with the PLC programming software. The configuration software manufacturer must have the facilities and a regular schedule for training so those individuals who receive the training will have the ability to develop or modify the touchscreen configuration. The touchscreen station is for operator interface only. All control functions are to be controlled by PLC software.
      - Omron CX Programmer

c. Passwords and User Levels - The touchscreen shall have 9999 passwords and 99 different Users' Levels. Harris County shall have an administration password that enables Harris County the ability to alter passwords and password levels. The administration password shall be able to be changed by Harris County. The user levels allow or not allow operators certain abilities on the control station. Some of these abilities are describe in this specification others will be determined during the initial software meetings with Harris County/Harris County. The touchscreen software shall allow for changes to the user password and then automatically sync to the rest of the system including the system logger. Systems that require a Windows domain server to manage users will not be accepted.
d. Touchscreen Integration: The touchscreen is only an operator interface to the system. No control logic is allowed on/in the touchscreen computer. All control logic is to reside and be performed in the PLC. Touchscreen stations and graphic control panels must be able to control the same points and be able to be integrated into the same control system.
e. All system functions currently incorporated into the system must be retained in the system after upgrades in addition to those listed in this specification. See section Advanced Software Features for additional functions required for this system.
f. Touchscreen Control Station Security:
   - All touchscreen control stations are to be enclosed to prevent tampering using a computer security enclosure that is lockable. This prevents non-key holders from tampering and port access on all touchscreen control stations.

Basic Software Feature Set

1. Door Control - Door control logic shall live in and be authorized by the PLC not the human-machine interface (HMI). The icons shall be on the HMI but the HMI programming has to refer to the PLC for decision and actions. The HMI only acts as a "window" into the PLC for door control. This is for security and reliability purposes. Door control shall also be integrated with the touchscreen stations to operate in the following manner.
   a. Unlock - During an Unlock function, all doors shall be configured to automatically relock after a programmable amount of time. All swinging doors will automatically perform in this manner during an Unlock function. All overhead doors (basement entrance and exit ramp) shall also be configured to automatically close after a programmable amount of time if so desired by Harris County. These programmable times are dynamically adjustable on the fly by Harris County.
   b. Hold Open - During a Hold Open door function, all swinging doors, regardless of the type of locking hardware, will remain unlocked until commanded to lock. Provide a flashing orange outline around candidate doors. Once selected to the Hold Open mode, the flashing orange outline will show steady indicating that door is in Hold Open mode. Only solenoid type locks are allowed to be continually powered for the Hold Open function. All full cycle locks with mechanical latchback features will first be provided with a momentary pulse long enough to unlock the door and latch it into the mechanical latchback position; then when the door is opened and then closed, the PLC will sense when the door re-secures and then will unlock it again. The PLC shall be programmed to interface to any lock in order to satisfy the Hold Open function as described.
   c. Overhead Door Open - When opening an overhead door, the PLC, through interposing mechanical relays, will energize the relay to power the door open until it senses the open limit

switch or until a programmable amount of time that is longer than the time it takes for the door to typically open. When the door open limit switch is sensed or the programmable time has elapsed, then the PLC will de-energize the interposing relay.

d. Overhead Door Close - When closing an overhead door, the PLC, through interposing mechanical relays, will energize the relay to power the door closed until it senses the close limit switch or until a programmable amount of time that is longer than the time it takes for the door to typically close. When the door close limit switch is sensed or the programmable time has elapsed, then the PLC will de-energize the interposing relay.
e. Overhead Door Stop - When opening or closing a overhead door, a stop command sent to the PLC will stop the door(s) in mid travel. Doors that are designed for a stop circuit shall have an interposing stop relay wired. When the stop command is issued, this relay will energize and stop the door. For doors that do not have a stop circuit, the stop command will de-energize the open and close relays. For doors that do not have a hardwired electrical interface external to the PLC (local pushbutton station); then if this door is not commanded open or closed, then the stop command shall be continuously issued by the PLC.
f. Overhead Door Dwell - A overhead door shall be able to be reversed by the control officer or IR sensor without forcing the officer to first stop the door. The PLC logic shall determine that the door is being requested to be reversed and shall stop the door at that moment for a programmable amount of time. After a sufficient dwell period, the door will reverse direction and continue until it completely reaches the open or close limit switch. This dwell time shall be programmable.
g. Sequencing Groups of Doors - When more than one door at a time is being unlocked, then the doors shall be sequenced such that no two doors simultaneously load the power supply. For solenoid type doors, this period of time is during the inrush of the solenoid, for motorized locks this period of time is until the lock has completed its cycle, and for sliding doors this period of time is one fourth of its cycle time. For locks that require power to lock, the PLC shall also sequence the locking action. In any case, the system must be programmed to handle all emergency and group unlocking without failure of the available power supply.
h. Door Breaches, Openings and Closings - Each controlled and monitored door shall be configured to have the ability to alarm or have a "Breach Alarm". A violation occurs when a door is opened and/or unlocked by some means other than the PLC. If Harris County determines that a specific door not Breach, then that door shall be configured to either display status only or to display status and to sound a short warning. All Breaches, Breach silencing, Breach resetting, changes of state of door switches, doors securing, and doors becoming unsecure shall be recorded separately to the Reporter/Logger system.
i. Door Switch Debounce - Logic must be programmed into the PLC so that the door must be secure for a sufficient amount of time to avoid a switch-bouncing problem. This time must be able to be configured.
j. Emergency Evacuation - Any door shall be configured to be part of any emergency evacuation group. When Emergency Evacuation is activated for the group then each door in the group will unlock as explained in Sequencing Groups of doors.
k. Group Unlocking - Any door shall be configured to be part of any group for group unlocking and locking. Doors selected to the group mode shall be show with a blue outline around the door icon. Selecting the Group Unlock icon and then the ON icon will open only the doors

selected to that group. Doors can be removed from the assigned group by re-selecting them, while in the group define mode, which will toggle the blue outline around the door icon to the off state.

l. Isolate - Any door shall be configured to be isolated. Isolating a door keeps that door from being unlocked. Isolate doors, have a Yellow "X" on the icon. Any isolation or removal of isolation for a door shall be recorded to the Reporter/Logger.

m. Shunt – Any door shall have the ability to be shunted. Shunting a door prevents the door from causing a breach alarm when opened in a means other than through the PLC. Selecting the Shunt function button will cause a flashing green outline to appear around door candidates. Selecting a door to shunt will cause the flashing green outline to become steady around the door icon.

n. Interlocks - Where two or more doors with electric hardware form a sallyport or where interlocks between hardware sets are indicated on the plans or specs, or will be specified by Harris County or engineer at the time of graphic panel submissions, the operation of the individual hardware sets shall be as follows: The controls will allow only one of the hardware sets to be in the non-secured condition at any given time unless the interlock override function is activated. These doors shall be indicated on the screen with a yellow outline around the door icon. The officer must press the interlock override pushbutton prior to unlocking a door to defeat the interlock. Logic shall also be incorporated such that the interlocks cannot be defeated by pressing two door pushbuttons simultaneously on the graphic panel or touchscreen.

2. Communications Control - Communications control shall be integrated with the touchscreen controls to operate in the following manner. Each touchscreen shall have its own dedicated intercom amplifier. Systems that share a common intercom amplifier and/or intercom buss and show BUSY, when in use, will not be accepted.

   a. Intercom Communications - Communicating to an intercom staff station location from a control location shall cause a PLC output to energize a sound card relay and connects the talk-back amplifier to the sound card's audio bus while also placing the control station's audio speaker onto the talk-back amplifier's speaker output. The control location then automatically monitors the intercom location. When the control officer presses push to talk, then the intercom staff station speaker shall be able to hear the control officer. Control stations shall be able to call other control stations utilizing the existing talk back amplifier configuration.

   b.. Paging - Page zone selection shall be configurable. Each intercom staff station shall be configurable to be included in any paging zone. The system shall have the ability to monitor paging speakers as well as staff stations.

   c. Isolate - Any intercom staff station can be configured to be isolated in software. When the pushbutton on an isolated staff station is pressed, then the audible annunciation at the officer's control station shall automatically be suppressed for that station. Visual annunciation, though, shall occur at the officer's control station. Isolate intercom stations shall have a yellow "X" on the intercom icon.

   d. Spot/Assessment Monitor - When communications are established with a staff station, the camera in the area around the staff station shall be displayed on the Spot/Assessment Monitor. When communications are terminated, the Spot/Assessment Monitor will display the last camera viewed. The cameras that are displayed shall be configurable for each alarm.

3. Video Control - Video control shall be integrated with the touchscreen controls to operate as an integrated HMI system.

SPECIFICATIONS (CONTINUED)

Software Operation

1. Functions - The touchscreen consists of a combination of icon icons and function icons. The icons are; the door icon, the intercom icon, the camera icon, the page icon, utilities icon and group icons. The function icons include unlock, stop, Hold open, isolate, utilities, interlock override, emergency evacuation, disable panel, silence, and reset. Pressing any of these icons will result in the DVS announcing the action performed.
2. Door Control - Pressing the Door Icon without a menu active will result in the act of locking the door. Unlock, Hold Open, Stop, Local Access, and isolate are menu functions that act with two keystrokes to make the door operate. Two keystroke operations for unlocking a door are critical so that doors cannot accidentally be unlocked. The keystrokes required to open an overhead door are the same. The officer will first press the Unlock icon in the Door Control menu area which will cause the DVS to announce "unlock"; then within 3 seconds, press the door icon on the graphic at the location of the door and the DVS will announce the actual name of the door as defined by Harris County. The door will become unlocked. Other doors may be unlocked by pressing other door icons within 3 seconds of the first. After 3 seconds of no icon depressions, or when another menu function is selected, or the Reset icon is pressed, the Unlock (or other command) cancels. After the door has unlocked for a specified amount of time, it will then relock automatically. To stop the motion of an overhead, door, the officer will press the STOP icon and the door icon.

   Using the Hold Open feature will unlock the door and keep it electrically unlocked until the officer presses the door icon only. The respective menu icon is illuminated during the 3-second selection process.

   a. Door Control Indicators: The door icon and a Door Status Icon are located on the graphic at each controlled door. The Door Status Icon is a graphical representation of the door. A swinging door depicts the door swing displays as secure, in mid travel, or fully open.
      - The door icon is gray and the Door Status Icon is gray outlined and is shown closed when the door is locked and secured.
      - The door icon is red and the Door Status Icon is gray outlined and is shown closed when the door is powered but the lock status switch, the bolt position switch, and the door position switch are still indicating that the door is secure.
      - The door icon is red and the Door Status Icon is red and is shown open when then door is powered and open.
      - The door icon is gray and the Door Status Icon is red and is shown open when then door is not powered but is open.
      - The Door Status Icon flashes red and shows the current status of the door if the door is violated or opened manually.
   b. Interlocked Doors are bordered around their icons in yellow when a door in a designated interlock group is unsecured. If an interlocked door is attempted to be unlocked, an Information Dialog box will appear indicating the door cannot be opened because of the interlock condition.
   c. The Reporter/Logger records to disk all openings, unlocking, re-locking, secure actions, door position, lock status, violations, violation silencing, violation resetting, interlock violations, and resetting of interlock violations.

SPECIFICATIONS (CONTINUED)

3. Isolate Door - Electrically controlled doors, or doors that are also controlled by field-mounted keypads or proximity card readers, can be isolated such that they cannot be opened. The officer first selects door isolate and then presses the door icon. The door icon will be displayed with a yellow "X" on the icon. Other doors may be commanded to become isolated by pressing other door icons within 3 seconds of the first. After 3 seconds, the door isolate command cancels. Repeating the process on an Isolated Door reverses the condition and returns the door to normal control.
   a. Door Isolate Indicators: The door icon will have a yellow "X" marked through it indicating that the door cannot be unlocked. Violations and the Door Status Icon will still be shown.
   b. Attempting to unlock an isolated door will cancel the command and the door will remain locked.
   c. Isolated Doors are reported by the Reporter/Logger during daily reports. Changing the state of Isolated Doors is recorded to disk.
4. Communicate - Establishing audio communications from the control panel is accomplished by simply pressing the Intercom icon at the location of the intercom station. There shall be an Intercom icon for each intercom or staff station. The audio is now connected to the remote station and the Intercom icon is yellow. The video of cameras viewing that area are now shown on the Spot/Assessment Monitor(s), and audio is established; while the camera symbols that cover that intercom station are now cyan. If no camera is viewing that location, audio will be connected without video. Repeating the operation will cancel the call. Connecting to another station will automatically cancel the previous connection. Pressing the Press-to-Talk allows the officer to talk to the station.
   a. The Intercom icon is used to show the state of the intercom call.
      - If the call button, located on the staff or inmate intercom station, is pressed, and the call has not been acknowledged, the Intercom icon flashes yellow and the DVS will sound a digitized tone until the call is connected.
      - If the call has been answered, the Intercom icon will be solid yellow, and all cameras called up to follow the intercom will be solid cyan. If another call is incoming while the first is being serviced, that Intercom icon flashes and the DVS will softly annunciate the ringing tone.
   b. The Reporter/Logger records any intercom call activity, including when the call was placed and answered.
5. Video - Establishing video (CCTV) communications from the control screen is accomplished by pressing the Video icon. Pressing the Video icon on the control screen at the location of the camera will cause the icon to be solid cyan and the CCTV image to be displayed on the Spot/Assessment Monitor(s). Pressing a different Video icon will cause that camera to be active and will cancel any others.
   a. The cyan Video icon on the Reporter/Logger shows the location of the camera.
   b. The Reporter/Logger shall record to disk all video activities.
6. Paging - This feature allows the officer to select which paging zones are connected for a subsequent paging operation. The officer will first press the Page icon on the screen which will open the paging channel for one-way communication.
7. Isolate Intercom - This feature allows the officer to shut off an intercom station so no audible incoming calls are received. An active intercom station is shown as a solid on yellow icon. An

Isolated intercom station is still accessible by the officer via the Intercom and Audio features. An Isolated intercom still visually annunciates. Only the ringing chime is suppressed.

a. Intercom isolate Indicators: The Intercom icon shall have a yellow "X" marked through it indicating that the intercom station has been isolated.
b. The Reporter/Logger shall record to disk all communications Isolate activities.

8. Call Window – The lower portion of the touchscreen shall be allocated and used as the Intercom Queue, Active window and Alarm Queue window. Each window shall be allocated and used for the purpose of making the communications task easy for the operator. The Intercom Queue window shall contain the text names of at least 5 incoming pending calls, the Active window contains the text name of the active intercom call, Zoom icon and Unlock and Cancel icon for the active call. This window pertains to every call assigned to the touchscreen station and is not exclusive to the intercom stations shown on the current active screen. This window will allow the operator to answer calls without having to go to a particular screen unless it is desired to do so.
   a. Intercom Queue - The list of 5 incoming pending calls designated for the particular touchscreen station shall show Harris County-assigned text names for the oldest five pending calls that have not been answered and in the order that they were initiated. As a call is answered, it shall be removed from the list and the list shall be automatically updated with any new incoming calls. If there are no pending calls, this list shall be blank. All incoming calls shall be logged into the Intercom Queue. None shall be lost. The Total Call window will show the number of current calls waiting for response.
   b. Call Answer icon - Each time this icon is touched, the active station will automatically cancel and the first station on the pending list will automatically connect.
   c. Zoom Active icon - When this icon is touched, the touchscreen will automatically go to the screen where the answered intercom station is located.
   d. Unlock icon – When communication is established with a calling intercom station, touching the Unlock icon will unlock the respective door as long as all logic rules are met.
   e. Call Cancel icon - When this icon is touched, the active intercom call is disconnected.

9.. Key Map Screen – The Site screen on each touchscreen shall be allocated and used for the purpose of making screen movement tasks easy for the operator. This window shall contain the whole site plan. All screens shall be accessible with one touch of the site plan such that any screen can be accessed from any other screen with just one touch of a screen's outlined area on the site plan of the Screen Zoom icons in the navigation panel. Each control screen shall be graphically outlined on the Zoom Window.
   a. Area Window - Pressing an outlined area of the site plan shall cause the touchscreen to go directly to the screen that controls the touched area. A distinctive audible sound shall annunciate when this action is performed.
   b. Location Indicator - The area containing the Screen Zoom icons shall highlight the current map view so that the operator knows exactly what screen is active in relation to the whole facility. The other areas shall be gray unless pending calls or alarms are active as explained by the Pending Call Indicator and the Alarm Indicator.
   c. Pending Call Indicator - When calls are pending from areas other than the current screen, and these calls are defined to be answered at a particular touchscreen station, the area of the call shall flash yellow on the Screen Zoom icons. If both an alarm and a pending call are active at the same time in an area, then the respective area shall flash red.

d. Alarm Indicator - When alarms are active from areas other than the current screen, the area of the alarm shall flash red on the Screen Zoom icons. If both an alarm and a pending call are active at the same time in an area, then the respective area shall flash red.
e. Zoom - To move to another part of the facility, the operator can simply zoom to it (if the touchscreen station is configured to do so). Zooming or paging to a new screen and the status indicators on the screen shall be instantaneous. When an alarm condition occurs in an area that is not currently displayed, the touchscreen will present this information to the operator at specific stations. This information includes the status of doors in other areas, duress alarms, panic alarms, emergency log-off and other conditions desired by Harris County.

10. Panel Control - Disable - Pressing this icon will immediately disable all functions of that remote control Touchscreens. Control will be transferred to Central Control.
11. Panel Control - Silence - Pressing this icon will silence the audible annunciators used to indicate a violated door, staff station request, or any other alarm.
12. Panel Control - Reset - Pressing this icon will cancel any Door Breach/Violation condition and/or any active menu. Reset does not affect communications calls.
13. Other Indications:
    a. Provide Status or health indication for each device/icon. If a touchscreen loses communication with a field device, a red "X" shall appear on the upper left corner of the icon indicating to the operator that communication has been lost to that device. This is a "per device" feature.
    b. Group control is accomplished via icons located on the touchscreen station. Group control shall be active for Door Control functions.
    c. Interlocks: Where two or more doors with electric hardware form a sallyport or where interlocks between hardware sets are indicated on the plans or specs, or will be specified by Harris County or engineer at the time of graphic panel/touchscreen submissions, the operation of the individual hardware sets shall be as follows: The controls will allow only one of the hardware sets to be in the non-secured condition at any given time unless the interlock bypass function is activated. The officer must press the interlock override icon prior to unlocking a door, via the Unlock icon in the Door Control menu area, to defeat the interlock. When the interlock override icon is pressed, the warning dialog box will warn of the override condition and allow the operator to proceed or cancel the request. The area around the interlock override icon will flash and continue to flash until it is reset by again pressing the interlock override icon.
        - A yellow background behind the icon will illuminate whenever any other door of that interlock group is unlocked or unsecured.
        - Attempting to unlock a door that is interlocked will cause an Information Dialog box to appear indicating the door cannot be opened because of the interlock condition.
        - The Reporter/Logger shall record to disk all interlock override activities.
    d. Capability for Emergency Evacuation Operations: Located on selected touchscreens are icons labeled as Emergency Release. When pressed, a warning dialog will be displayed explaining the consequences of proceeding with the evacuation and offers directions for theoperator. The operator shall be able to see all doors which will be evacuated as they will be highlighted in red. Proceeding with the Emergency Release will open all the associated doors and cause an emergency tone to be sounded at the touchscreen.
        - The background around the Emergency Release icon shall flash red and the DVS shall continuously sound an Emergency Evacuation tone.

- All doors of the configurable Emergency Evacuation route will open. The doors unlocked under the emergency evacuation should flash red on the door icon.
- The Reporter/Logger shall record to disk all emergency release activities.

e. When the loss of AC power is detected and the PLC reverts to UPS or emergency power, an indication labeled Emergency Power shall flash and the alarm shall sound.

f. General graphics design shall be passive grey as the normal indication with the addition of color to indicate status an events that the system operator needs to respond to. Design should be such that the visual operator fatigue is minimized by the graphics.

Spares

1. Provide 1 spare Touchscreen monitor and Touchscreen CPU computer completely programmed with each control location of the facility. Upon boot up of this computer the machine will figure out which station it is and automatically assume the location.
2. Provide a complete GUI (Wonderware) license and any other software required for this spare machine.

EXECUTION

Examination

1. Working Order – Verify that all equipment is in working order and within heat tolerances.
2. Installation – Verify that the equipment has been installed in accordance will all codes and complies with the Security Electronics General Section and Division 16 requirements.
3. Confirm and verify all equipment is in a pristine new condition with manufacturers' warranty still intact. Make sure all wiring has been tied down and dressed out to professional standards.
4. Confirm all equipment is clean, wiped off and ready for occupancy and Harris County use.

Closeout

1. In the presence of a Harris County representative and Harris County, verify that the material and software provided meets this specification. If there are deficiencies and the vendor was at fault or negligent, the vendor is responsible for immediate correction.
2. Training - Verify all training has been completed as is described in Security Electronics General Section.

3 As-Built Documentation – Deliver as-built documents for this section and all sections of the Security Electronics Division. Also deliver all documents, instructions and literature that came with the material in this section.

ENHANCED SOFTWARE FEATURES

Summary of Work

1. Vendor shall provide these enhanced software features in addition to the standard feature set described in the Touch Screen Section.
2. These software features shall provide Harris County with useful tools to run their facility in a safer, more efficient fashion.

SPECIFICATIONS (CONTINUED)

PRODUCTS

System Requirements

1. Acceptable Manufacturers - Acceptable manufacturers who have demonstrated, produced, and have history of developing products that meet the per-qualifications as outlined in part 1.3 in the Security Electronics General section:

Requirements

1. Task Groups – Any touchscreen can take over any other touchscreen by assigning or reassigning its Task Group. Moreover, each touchscreen can be broken down into "functional groups" or screens and each of these can be controlled by any station dynamically.
   a. Each touchscreen station shall be configurable to control part or all of the facility including door control, intercom, lighting, video, and all other controls.
   b. The administrator shall have the ability to assign and reassign Task Groups to each touchscreen station.
   c. The software should allow for on-the-fly task group changes and shall define which screens on a screen by screen basis each location has control over.
   a. All pending intercom calls shall follow their respective screen and roll over with a Task Group change.
   b. All other alarms or other calls shall also follow their respective screen to the new touch screen.
   d. Secondary rollover locations shall also be defined as to allow transfer of task upon shutdown. Each touch screen shall have the complete site software and unique IP address. At startup, and authorized user, can assign the area served by the touch screen through the HMI, without changing any Windows processes or IP Addresses.
   e. Task Group Assignment – Provide the ability for an authorized operator (see User Levels) to change task assignments between touchscreen locations. This shall happen on the fly and not require any other user intervention. If a touchscreen station logs out, the touchscreen station with the next assigned priority, will receive the logged off stations screens including all task group assignments.
2. Harris County Re-configuration – Vendor shall program the system to allow Harris County to change the following settings: Note: The Programmable logic controller/Human-Mmachine Interface (PLC/HMI) system MUST allow setting re-reconfiguration in RUNTIME mode, by an authorized user (see User Levels), in a GUI based format. Linear formats are not acceptable.
   a. This device configuration shall include:
      - Unlocking timers
      - Hold-open timers
      - Group functions
      - Notes function
      - Screen text
      - Hold open reminder timers
      - Shunt reminder timers
      - Intercom isolate auto reset timers
      - Intercom timer limit alarms
      - Monitor sequence builder
      - Monitor sequence dwell time
      - Device text

b. All these device configuration features shall not require the PLC ladder-logic to be recompiled and/or reloaded onto the PLC's. This must happen dynamically. Systems that require a re-compile will not be accepted.

3. Digital Voice System (DVS):
   a. The system shall incorporate digital voice software and hardware to integrate with the touchscreen so that all operator actions, system warnings, system emergencies, and other pertinent information are announced to the operator through an audio card operating on the PC's bus. Executing the DVS sound shall not prevent the operator from performing any screen functions, and the operator will not have to wait for the sound to be completed before proceeding to other screen functions. Within a system utilities screen the operator shall be able to choose to disable the voice. Harris County shall approve the vocabulary during the system design phase and shall be allowed to have the complete vocabulary modified once during this time.
   b. When Harris County changes the text for a door opening or intercom station dynamically on the screen, the DVS should automatically change itself to "read" the new text without a recompile or having to call the original company to upload a new voice file.
4. Duress Quick Key Log Off
   a. Each non Central Control touchscreen shall have an icon labeled "Officer Duress" that allows "one touch" log out and includes an icon on the Central Control touchscreen that displays the respective control room is in duress.
   b. The remote touchscreen is not able to log back in until Central Control enables this touchscreen.
   c. User Name and password then logs back in the user at the remote touchscreen.
5. Extended CCTV Controls – Each touchscreen shall have "CCTV Control Screen" that allows operators to dynamically create, modify, start, stop and change the dwell time of camera sequences for all monitors in the CCTV system.
   a. Each touchscreen shall have a CCTV screen that is used to select any sequencing monitor on the project. Once on this screen, the officer can select a monitor them close the window and see a graphical layout of all CCTV monitors under control of that respective touchscreen and create sequences for each monitor or segment of a multiview monitor.
   b. Each camera shall be shown in a list and an operator can select the monitor, which highlights, then select a camera to "spot" an image to that particular monitor in the system. The new camera number shall then be shown on that monitor icon.
   c. Iris (open and close) and Focus (open and close) icons shall be shown for manual control of respective cameras.
   d. Quads: For quads each quadrant shall be selectable as a separate monitor. Quad monitor shall also have icons to switch between full screen and quad screen modes.
   e. Sequencing: Each monitor shall have it's own sequence list. The officer shall select the monitor icon followed by the sequence icon which causes a list of cameras appear in the order of their sequence.
   f. Add/Change: The software shall allow cameras to be added or deleted anywhere in the sequence.
   g. Start/Stop Sequence: "Start", "Stop" and selectable "Dwell Time" icons respectively control the sequence.

h. As an integrated part of the touchscreen there will be a dedicated section to show video streams from the CCTV system. This display shall be capable of displaying live video or recorded video playback based on time and date. This view will also be tied to the alarm window so that as alarms are selected the corresponding camera video can be played back to show the events that led up to the alarm.

i. As an integrated part of the touchscreen there will the ability to open a moveable popup windows to show video streams from the CCTV system. This display shall be capable of displaying live video or recorded video playback based on time and date.

6. Icon Configuration

a. The PLC/HMI system MUST provide for Automated timed events to take place in a GUI, and not a linear, format. These events can include automatic turn on/off lighting, TV or Power at specific times. The GUI format will allow the operator to accept or reject the timed event. Door shunt features can be turned off per a timed event. Breach alarms could be disabled during the day and turned on at night. Any system feature can be assigned to a timed event. Systems that do not provide for a dynamic user definable event structure will not be accepted.

b. The PLC/HMI system MUST provide a TCP/IP Ethernet based interface from the PLC to the CCTV switcher.

c. The PLC/HMI system MUST provide a TCP/IP Ethernet based interface from the PLC to the Control Access System.

d. The follow sequence MUST be followed to maintain security at each HMI/Touch screen location:

- The windows user for the Wonderware HMI application shall auto-login at the PC boot/Startup time
- All applications associated with the HMI/PLC system must auto start at auto-login or PC boot/Startup time.
- Only icons for applications that the HMI (Wonderware) user should have access to shall be on the desktop
- All icons on the desktop shall be single click executable so that a touch screen only (No Mouse) user can start the application
- The normal windows explorer shell desktop shall not be used for the HMI (Wonderware) user thus removing all start menu and quick launch functionality or standard desktop right click functionality.
- CD-Rom auto-run shall be disabled
- CD-Rom and floppy disk must be disabled for HMI (Wonderware) users
- HMI (Wonderware) users must not have administrative privileges
- The PC machine must boot only from hard disk, not from CD-Rom, floppy disk or USB device
- The PC machine CMOS setup screens shall be password protected

7. Notes Feature:

a. The system shall include an area of the screen which allows operators to “tag” a door with textual information. This information will be useful for inmate lockdowns, problem inmates, maintenance issues and general information about that door or that room’s occupants.

b. Functionality: An Info Tag menu icon shall be pressed and then a device on the screen. A note box will appear in the lower left hand side of the screen and allow the user to enter text into the

box. Once a tag has been entered for a device the icon "highlights" in a distinguishable way (a small "N" on the icon) to alert the operator there is information useful to that particular room or device. If the Info Tag menu item and then the highlighted device are re-selected, the respective information shall then be displayed in the box.

c. All text inside a tag and any changes to text inside a tag shall be recorded to the Reporter/Logger database. From the Reporter/Logger all tag information can be sorted, viewed and printed from the database.
d. Once all data inside the tag is cleared, the door icon changes back to the normal state from the highlighted state.
e. Tag information is not limited to only doors. All devices can have tags (including but not limited to intercom stations, paging speakers, duress devices, cameras, etc). This will be extremely useful for logging broken devices or logging helpful information for maintenance people. This can also be helpful operationally for logging why an inmate is locked down. Each device tag shall also have 3 priority levels associated with each note placed on each device. Searches can be done on the Reporter/Logger based on priority.

8. Network Bridge - The Reporter/Logger will include a complete and secure Network Bridge the Security Electronics System network and the Facility's Network.
   a. This connection shall include all routers, firewalls, firewall setups, and hubs as necessary to make it as secure as possible.
   b. Over this connection all information flowing from the Security Electronics System network to the Facility's network like:
      - Reporter/Logger information
      - Out of network or remote Touchscreens or other operator stations
      - . JMS information if required
      - Handheld or PDA information if required
      - Wireless Tablet PC information
   c. Vendor is required to work with the facility IT group to establish the way in which the security system will "talk" or communicate with the facility network.
   d. Vendor shall have the responsibility to design into the system all physical wiring required for this connection whether shown on the plans or not.
9. Journal Log:
   a. The system may have software capabilities on the Touch Screen that allows an officer to type up an entry log which will then get stored in the Reporter/Logger database. This log could be used to tag and/or note occurrences that need documenting. (Example: a fight happened and what the officer did to correct the situation).
   b. Information entered into the Journal will be date and time stamped by the system and sent off to the data base to be stored.
   c. Stored data should not be editable. Stored data logs should be sortable, viewable and printable from the database.

EXECUTION

Examination

1. Working Order – Verify that all equipment is in working order and within heat tolerances.

2. Installation – Verify that the equipment has been installed in accordance will all codes and complies with the Security Electronics General Section and Division 16 requirements
3. Confirm and verify all equipment is in a pristine new condition with manufacturers warranty still intact. Make sure all wiring has been tied down and dressed out to professional standards.
4. Confirm all equipment is clean, wiped off and ready for occupancy and Harris County use.

Closeout

1. In the presence of a Harris County representative and Harris County, verify that the material and software provided meets this specification. If there are deficiencies and the vendor was at fault or negligent, the vendor is responsible for immediate correction.
2. Training - Verify all training has been completed as is described in Security Electronics General Section
3. As-Built Documentation – Deliver as-built documents for this section and all sections of the Security Electronics Division. Also deliver all documents, instructions and literature that came with the material in this section.

REPROCESSED ELECTRONIC HARDWARE

Summary of Work

1. Vendor shall provide these services in addition to the services described in all the Sections.
2. These services shall provide Harris County with reprocessed equipment that is reliable and integrate seamlessly into all Sections.
   Vendor will evaluate, inspect, test and clean all electronic equipment to be reprocessed.
3. All work performed in all Sections shall be performed in a series of stages floor by floor or area by area in order not to disrupt daily business or institution activities.

SERVICES

Requirements

1. Both SEC Security Electronic Cabinet on the 1st floor containing the Sound System and PLC for controlling the first floor and basement are to be moved from DVR room into adjacent Comm room.
2. All work (wire, wire installation, terminations and mounting) shall be performed by the systems vendors to accommodate moving both SEC units into the Comm room.
3. The DVR room will be reassigned as a backup Control Center, with a touchscreen and two multi-view 22” monitors using TS12.
4. All work (wire, wire installation, terminations and mounting) shall be performed by the systems vendors to accommodate reassigning DVR room as backup Control Center.
5. All 14 SEC from the 1st floor to the 7th floor shall be inspected, tested and cleaned.
6. All touchscreen control stations shall be inspected, tested and cleaned.
7. All input devices associated with the touchscreen control stations shall be inspected, tested and cleaned.
8. All intercoms (speakers, microphones and call buttons) shall be inspected, tested and cleaned.

SPECIFICATIONS (CONTINUED)

SPARE PARTS

Requirements

1. In order to maintain the equipment in the SEC Harris County requires spare parts as listed.

QTY	ITEM NO.	DESCRIPTION
1	Hirshmann	Fiber Network Switch
	Network Switch	SC Fiber Switch RS2-FX/FX
1	Dukane	Audio 2 way Amplifier
2	Phoenix PS	Power Supply 24VAC-10A
1	Omorn	CPU CPU66H
1	Power Supply	PA402
1	Network Card	Etn21itd

DEMOLITION AND REFUSE/TRASH

Summary of Work

1. Vendor is responsible for removal, disposal, storage and recycling of all equipment, wiring and refuse/trash.
2. Equipment (computers, DVRs, racks, matrix, etc.) removed from DVR room and JJC building will be neatly stored in a specified room located at the JJC building.
3. Repair, restore, and refinish to original appearance all areas as needed due to removal of the entire analog camera system and associated equipment, and wiring from JJC building.
4. Vendor is responsible for removing refuse, debris, trash and non-recyclables materials from construction site and all work areas.
5. All removed refuse, debris, trash and non-recyclables materials are to be placed in transparent bags for disposal, transparent disposal bags are furnished by Vendor.
6. All work performed in all Sections shall be performed in a series of stages floor by floor or area by area in order not to disrupt daily business or institution activities.

Demolition:

1. Remove all hardware associated with analog cameras from the JJC building for recycle.
2. Remove all analog cameras from JJC building for storage.
3. Remove all power supply unit associated with analog cameras from JJC building for storage.
4. Remove all Digital Video Recorders from JJC building for storage.
5. Remove all DVR racks and equipment associated with analog camera system from JJC building for storage.
6. Remove Matrix system and all equipment associated with the analog camera system from JJC building for storage.
7. Replace all ceiling tiles that require replacement due to removal of all analog cameras and associated equipment from JJC building.

SPECIFICATIONS (CONTINUED)

8. All repairs to structure performed due to removal of the entire analog camera system and associated equipment from JJC building should meet all state, local building and NFPA codes.
9. Remove all obsolete equipment associated with the access control management system that will be replaced with new upgraded equipment from JJC.
10. All removed wiring and/or cabling is to be placed in specified recycle container.
    All removed equipment is to be placed in specified locations.

Refuse/Trash:

1. All work areas should be free of trash and debris at the end of the day.
2. Trash and debris in transparent plastic bags should be placed in the department trash truck located in the sallyport area.
3. The loading dock located in basement must be free of obstructions at all times.
4. Parking is not available in the basement or sallyport areas for vendors.
5. Harris County has the right of first refusal on all removed equipment and cabling.

PRICING/DELIVERY INFORMATION

Provide pricing for the proposed Surveillance with Internet Protocol Based Closed Circuit Television System for the Harris County Juvenile Probation Department including all hardware, software and services. Pricing **MUST** be provided in hard paper copy and one (1) CD version, and a spreadsheet of the bill of materials to be furnished.

RENEWAL OPTIONS

Harris County may consider four (4) one year renewal options, renewable one year at a time, based upon the same terms, conditions and pricing as the original year. Renewal is subject to approval by Harris County Commissioners Court. Once renewal options are exhausted, the contract must be rebid. Harris County reserves the right to rebid at any time as is in its best interest and is not automatically bound to renew.

TAX FORM/DEBT/ RESIDENCE CERTIFICATION
(for Advertised Projects)

Taxpayer Identification Number (T.I.N.): _____

Company Name submitting Bid/Proposal: _____

Mailing Address: _____

Are you registered to do business in the State of Texas? ☐ Yes ☐ No

If you are an individual, list the names and addresses of any partnership of which you are a general partner or any assumed name(s) under which you operate your business

_____

_____

I. **Property:** List all taxable property in Harris County owned by you or above partnerships as well as any d/b/a names. (Use a second sheet of paper if necessary.)

Harris County Tax Acct. No.*	Property address or location**

** This is the property account identification number assigned by the Harris County Appraisal District.*

*** For real property, specify the property address or legal description. For business personal property, specify the address where the property is located. For example, office equipment will normally be at your office, but inventory may be stored at a warehouse or other location.*

II. Harris County Debt - Do you owe any debts to Harris County (taxes on properties listed in I above, tickets, fines, tolls, court judgments, etc.)?

☐ Yes ☐ No If yes, attach a separate page explaining the debt.

III. Residence Certification - Pursuant to Texas Government Code §2252.001 *et seq.*, as amended, Harris County requests Residence Certification. §2252.001 *et seq.* of the Government Code provides some restrictions on the awarding of governmental contracts; pertinent provisions of §2252.001 are stated below:

(3) "Nonresident bidder" refers to a person who is not a resident.

(4) "Resident bidder" refers to a person whose principal place of business is in this state, including a contractor whose ultimate parent company or majority owner has its principal place of business in this state.

☐ I certify that _____ is a Resident Bidder of Texas as defined in Government Code
[Company Name]
§2252.001.

☐ I certify that _____ is a Nonresident Bidder as defined in Government Code
[Company Name]
§2252.001 and our principal place of business is _____.
[City and State]

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MINIMUM INSURANCE REQUIREMENTS

During the term of the Contract, the Contractor at its sole cost and expense shall provide primary commercial insurance of such type and with such terms and limits as may be reasonably associated with the Contract. As a minimum, the Contractor shall provide and maintain the following coverage and limits:

A. **Workers Compensation**, as required by the laws of Texas, **and Employers' Liability**, as well as All States, USL&H and other endorsements if applicable to the project, and in accordance with state law.

Employers' Liability

- Each Accident: $1,000,000
- Disease–Each Employee: $1,000,000
- Policy Limit: $1,000,000

B. **Commercial General Liability**, including but not limited to the coverage indicated below. Coverage shall not exclude or limit Products/Completed Operations, Contractual Liability, or Cross Liability. Where exposure exists, the County may require coverage for watercraft, blasting, collapse, explosions, blowout, cratering, underground damage, pollution, or other coverage. *Harris County shall be named Additional Insured on primary/non-contributory basis.*

- Each Occurrence: $1,000,000
- Personal and Advertising Injury: $1,000,000
- Products/Completed Operations: $1,000,000
- General Aggregate (per project): $2,000,000

C. **Automobile Liability**, including coverage for all owned, hired, and non-owned vehicles used in connection with the contract. *Harris County shall be named Additional Insured on primary/non-contributory basis.*

- Combined Single Limit-Each Accident: $1,000,000

D. **Umbrella/Excess Liability** *(Harris County shall be named Additional Insured on primary/non-contributory basis)*

- Each Occurrence/Aggregate: $1,000,000

E. **Professional/Errors & Omissions Liability** (if applicable)

- Each Occurrence/Aggregate: $1,000,000

The County reserves the right to require additional insurance if necessary. Coverage shall be issued by companies licensed (by TDI) to do business in Texas and who have an A.M. Best rating of at least A-. Contractor shall furnish evidence of such insurance to the County in the form of unaltered insurance certificates. If any part of the contract is sublet, insurance shall be provided by or on behalf of any subcontractor, and shall be sufficient to cover their portion of the contract. Contractor shall furnish evidence of such insurance to the County as well.

Policies of insurance required by the contract shall waive all rights of subrogation against the County, its officers, employees and agents. If any applicable insurance policies are cancelled, materially changed, or non-renewed, contractor shall give written notice to the County at least 30 days prior to such effective date and within 30 days thereafter, shall provide evidence of suitable replacement policies. Failure to keep in force the required insurance coverage may result in termination of the contract. Upon request, certified copies of original insurance policies shall be furnished to the County.

The requirements stipulated in this attachment do not establish limits of contractor liability.

Rev. 10/2011

TWCC RULE 110.110 WORKERS' COMPENSATION INSURANCE COVERAGE

If this bid/proposal package is for a building or construction contract, all of the provisions of this rule as shown below apply. Since this is a mandatory requirement, cost increases should not be experienced because of the need to comply with the Texas Workers' Compensation Law. For additional information contact the Texas Workers' Compensation Commission, Southfield Building, 400 S. IH-35, Austin, Texas 78704-7491, (512) 440-3618.

A. Definitions:

Certificate of coverage ("Certificate") - A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement, TWCC-81, TWCC-82, TWCC-83, or TWCC-84 showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

Duration of the project - Includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

Persons providing services on the project ("subcontractor" in §406.096) - Includes all persons or entities performing all or part of the services the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" include, without limitation, providing, hauling or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

B. The Contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the contractor providing services on the project, for the duration of the project.

C. The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract.

D. If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.

E. The Contractor shall obtain from each person providing services on a project, and provide to the governmental entity:

(1) A certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

(2) No later than seven (7) days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

F. The Contractor shall retain all required certificates of coverage for the duration of the project and for one (1) year thereafter.

G. The Contractor shall notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

H. The Contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Workers' Compensation Commission, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

I. The Contractor shall contractually require each person with whom it contracts to provide services on a project to:

(1) Provide coverage, based on reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all its employees providing services on the project, for the duration of the project.

(2) Provide to the Contractor, prior to that person beginning work on the project a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project.

(3) Provide the Contractor, prior to the end of coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

(4) Obtain from each other person with whom it contracts, and provide to the Contractor:

(a) A certificate of coverage, prior to the other person beginning work on the project, and

(b) a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;

(5) Retain all required certificates of coverage on file for the duration of the project and for one (1) year thereafter.

(6) Notify the government entity in writing by certified mail or personal delivery, within ten (10) days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and

(7) Contractually require each person with whom it contracts, to perform as required by paragraphs (1) - (7), with the certificates of coverage to be provided to the person for whom they are providing services.

J. By signing this contract or providing or causing to be provided a certificate of coverage, the Contractor is representing to the governmental entity that all employees of the contractor who will provide services on the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

K. The Contractor's failure to comply with any of these provisions is a breach of contract by the contractor which entitles the governmental entity to declare the contract void if the Contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the governmental entity.

Revised 4/02

Attachment e

REFERENCES

Reference #1

Organization Name:
Contact Name/Telephone No.:
Address:

Services provided:

Reference #2

Organization Name:
Contact Name/Telephone No.:
Address:

Services provided:

Reference #3

Organization Name:
Contact Name/Telephone No.:
Address:

Services provided:

REFERENCES (Continued)

Reference #4

Organization Name:
Contact Name/Telephone No.:
Address:

Services provided:

Reference #5

Organization Name:
Contact Name/Telephone No.:
Address:

Services provided:

Reference #6

Organization Name:
Contact Name/Telephone No.:
Address:

Services provided:

EXHIBIT A

Harris County Juvenile Justice Center (JJC)
CCTV System Camera Count by Floor and Wing

		SD	MP
7th floor	east	3	
6th floor	east	9	10
5.5 floor	east	11	7
5th floor	east	13	7
4th floor	east	11	7
3rd floor	east	13	7
2nd floor	east	11	7
1st floor	east	29	
basement	east	29	1
		129	46

		SD	MP
10th floor		0	
9th floor	west	0	
8th floor	west	3	
7th floor	west	5	
6th floor	west	2	
5th floor	west	6	
4th floor	west	3	
3rd floor	west	10	
2nd floor	west	2	
1st floor	west	5	
basement	west	5	
		41	

north stairwell	19
south stairwell	21
elevator #7	1
elevator #8	1
	42

Total V960D-WN312M standard resolution (SD) cameras	212
Total V961D-WN312M megapixel resolution (MP) cameras	46
Total number of cameras	258